

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF LOUISIANA

In re: Oil Spill by the Oil Rig  
“Deepwater Horizon” in the Gulf  
of Mexico, on April 20, 2010

Applies to: *Pleading Bundle C*

Applies to: No. 10-2771

MDL No. 2179

SECTION: J

JUDGE BARBIER

MAGISTRATE SUSHAN

**LOCAL GOVERNMENT ENTITY**

**MASTER VOLUNTARY ANSWER TO COMPLAINT AND PETITION OF TRITON  
ASSET LEASING GMBH, ET AL FOR EXONERATION FROM OR LIMITATION OF  
LIABILITY (Rule 9(h))**

**MASTER VOLUNTARY CLAIM IN LIMITATION (NO. 10-2771) (Rule 9(h))**

and

**VOLUNTARY MASTER COMPLAINT, CROSS-CLAIM, AND THIRD-PARTY  
COMPLAINT**

**Complaint in Admiralty**

**Rule 9(h)**

**MASTER ANSWER TO COMPLAINT AND PETITION OF TRITON ASSET LEASING  
GMBH, ET AL FOR EXONERATION FROM OR LIMITATION OF LIABILITY**

Claimants, including local government entities and officials, such as cities, towns, counties, villages, parishes, municipalities, special districts, school boards, sheriffs, public boards, district attorneys, institutions, departments, commissions, districts, corporations, agencies, authorities, and any agencies or subdivisions of any of these, and other local public or governmental bodies in Florida, Alabama, Mississippi, Louisiana and Texas, who have suffered damage, destruction, or diminution in value of property, loss of tax revenue, income and/or use, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, and/or costs as a result of the oil spill by the oil rig Deepwater Horizon in the Gulf of Mexico on April 20, 2010, allege as follows, for themselves and all others similarly situated, as their Answer to the Complaint and Petition for Exoneration from or Limitation of Liability filed by Triton Asset Leasing GmbH, Transocean Holdings, L.L.C, Transocean Offshore Deepwater Drilling, Inc., and Transocean Deepwater, Inc. (the “Petitioners”):

**FIRST DEFENSE**

The allegations of the Complaint fail to state a claim upon which relief may be granted.

**SECOND DEFENSE**

The Limitation of Liability Act, 46 U.S.C. § 30501, *et seq.*, is discriminatory and, thus, unconstitutional in that it deprives the Claimants of rights without due process of law in violation of the Fifth and Fourteenth Amendments to the United States Constitution and does not provide

for equal protection of the laws pursuant to the Fifth and Fourteenth Amendments to the United States Constitution.

### **THIRD DEFENSE**

The limitation fund is inadequate, and the Complaint should be dismissed because Petitioners have failed to deposit adequate security for the vessel identified in the Complaint for Exoneration From or Limitation of Liability. Pursuant to Rule F(1) of the Supplemental Rules for Certain Admiralty and Maritime Claims, the proper limitation fund must be deposited at the time of filing. Petitioners' deposit, at the time of filing, did not meet this standard.

### **FOURTH DEFENSE**

The Limitation of Liability Act is not applicable to the instant case because, at all times pertinent herein, the Deepwater Horizon was operated in a willful, wanton, and reckless manner. Moreover, the conduct and actions which lead to Claimants' injuries took place with the privity or knowledge of the owners, managing owners, owners *pro hac vice*, and/or operators of the vessel involved.

### **FIFTH DEFENSE**

To the extent that Petitioners' insurers attempt to avail themselves of the limitation/exoneration defense, Claimants assert that the protections of the Limitation of Liability Act are unavailable to insurers of vessel owners under the circumstances. Moreover, no *prima facie* case has been made establishing that they are entitled to avail themselves of the Limitation of Liability Act.

#### **SIXTH DEFENSE**

The Complaint for Exoneration From or Limitation of Liability contains vague and ambiguous statements that are deficient under Federal Rule of Civil Procedure 12(e), and Claimants seek definitive statements of the allegations.

#### **SEVENTH DEFENSE**

The events culminating in the injuries to Claimants were the result of the negligence, fault, or want of due care on the part of Petitioners and/or those for whom Petitioners are responsible, and/or the unseaworthiness of the Deepwater Horizon, all of which was within the privity and knowledge of Petitioners, for which the Complaint for Exoneration From or Limitation of Liability should be denied.

#### **EIGHTH DEFENSE**

The events culminating in the injuries and damage to Claimants were not the result of any negligence, fault, or want of due care on the part of Claimants or those for whom Claimants may be responsible. Furthermore, Petitioners have the burden of proof on this issue, and Petitioners cannot meet that burden.

#### **NINTH DEFENSE**

Claimants further allege that there was insurance coverage on the Deepwater Horizon insuring Petitioners in the event of an occurrence such as that which is the subject of Claimants' claims, and the proceeds of said insurance policy should be included in the limitation proceeding in the event the Court determines that the limitation proceeding is appropriate.

#### **TENTH DEFENSE**

Claimants state that the proceeds of any judgment, award, or settlement which may be received by Petitioners from any third party in recompense of any losses or damages sustained to the property or interests of Petitioners, as a result of the fault or alleged fault of said third party, must be included in the limitation fund.

#### **ELEVENTH DEFENSE**

Claimants reserve the right to contest the appraisal value of the Deepwater Horizon, its engines, apparel, appurtenances, pending freight, etc., and the adequacy of the security.

#### **TWELFTH DEFENSE**

The limitation fund is inadequate and should be increased and/or the limitation action should be dismissed because the limitation fund does not properly account for the value of the minerals and other appurtenances, attachments, freight and/or cargo aboard the vessel, subject to the control of the vessel, and/or owned by Petitioners.

AND NOW, specifically reserving all defenses asserted herein, Claimants respond to the individual Paragraphs of the Complaint for Exoneration From or Limitation of Liability, upon information and belief, as follows:

1. The allegations contained in Paragraph 1 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.
2. The allegations contained in Paragraph 2 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.
3. The allegations contained in Paragraph 3 of the Complaint are denied for lack of

knowledge or information sufficient to form a belief about the truth of said allegations.

4. The allegations contained in Paragraph 4 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

5. The allegations contained in Paragraph 5 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

6. The allegations contained in Paragraph 6 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

7. The allegations contained in paragraph 7 of the Complaint are denied.

8. The allegations contained in Paragraph 8 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

9. The allegations contained in Paragraph 9 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

10. The allegations of Paragraph 10 of the Complaint are denied.

11. The allegations of Paragraph 11 of the Complaint are denied.

12. The allegations of Paragraph 12 of the Complaint are denied.

13. The allegations contained in Paragraph 13 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

14. The allegations contained in Paragraph 14 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

15. The allegations contained in Paragraph 15 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

16. The allegations contained in Paragraph 16 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

17. The allegations contained in Paragraph 17 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

18. The allegations of Paragraph 18 of the Complaint are denied.

19. The allegations contained in Paragraph 19 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

20. The allegations contained in Paragraph 20 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

21. The allegations contained in Paragraph 21 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

22. The allegations contained in Paragraph 22 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

23. The allegations contained in Paragraph 23 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

24. The allegations contained in Paragraph 24 of the Complaint are denied for lack of knowledge or information sufficient to form a belief about the truth of said allegations.

25. The allegations contained in the prayer for relief are not statements of facts, but conclusions of law, from which no response is necessary from these Claimants. However, if a response is necessary, said allegations are denied. Claimants specifically deny the adequacy of the valuation of the Deepwater Horizon as asserted by Petitioners. Claimants further re-urge

their prior objections to Petitioners' failure to include in the limitation fund any insurance proceeds and any sums received or which may be received by Petitioners from any third party as a result of the fault or alleged fault of said third party. Claimants further deny the adequacy of Petitioners' *Ad Interim* Stipulation for an amount equal to the value of their interest in the Deepwater Horizon and its appurtenances and hereby makes demand for Petitioners to either deposit cash proceeds into the registry of the Court in the amount of the stated value of the vessel and/or provide a bond for the value of the vessel issued by a reputable surety company to be approved by the Court. In so doing, Claimants specifically reserve the right to contest the stated value of the vessel and the limitation fund as aforesaid. Claimants further deny the applicability of Petitioners' Complaint to claims arising under the Oil Pollution Act of 1990 or any state statutory claims.

26. A non-jury trial pursuant to Rule 9(h) of the Federal Rules of Civil Procedure is requested.

WHEREFORE, Claimants, including local government entities in Florida, Alabama, Mississippi, Louisiana and Texas, pray that the Petition filed herein seeking exoneration from or limitation of liability and any and all injunctions or restraining orders granted in this matter be dismissed and dissolved and, in the alternative, that Petitioners be required to deposit additional security in the amount required by law, in default of which the exoneration/limitation complaint should be dismissed and pending which any injunction or restraining order should be dissolved.



**MASTER VOLUNTARY CLAIM IN LIMITATION (NO. 10-2771) (Rule 9(h))**

Claimants, including local government entities in Florida, Alabama, Mississippi, Louisiana and Texas, while specifically reserving all defenses asserted herein, file, for themselves and those similarly situated, their Master Claim in Limitation in response to the Complaint for Exoneration from or Limitation of Liability filed herein by Petitioners, Triton Asset Leasing GmbH, Transocean Holdings LLC, Transocean Offshore Deepwater Drilling, Inc., and Transocean Deepwater, Inc., as owners, managing owners, owners *pro hac vice* and/or operators of the oil rig Deepwater Horizon (hereinafter “Petitioners”), and, in support thereof, state as follows:

27. The claims presented in this Master Claim in Limitation are admiralty or maritime claims within the meaning of Rule 9(h) of the Federal Rules of Civil Procedure. Claimants hereby designate this case as an admiralty or maritime case, and a non-jury trial pursuant to Rule 9(h) is requested.

28. Claimants herein include local government entities and officials, such as cities, towns, counties, villages, parishes, municipalities, special districts, school boards, sheriffs, district attorneys, public boards, institutions, departments, commissions, districts, corporations, agencies, authorities, and any agencies or subdivisions of any of these, and other local public or governmental bodies of any kind which are not state agencies, in Florida, Alabama, Mississippi, Louisiana and Texas who have suffered and continue to suffer damage, destruction, or diminution in value of property; loss of tax revenue, income and/or use; costs of response, removal, clean-up, restoration and/or remediation; and/or other damages, losses, or costs as a

result of the oil spill by the oil rig Deepwater Horizon in the Gulf of Mexico on April 20, 2010.

**FACTUAL ALLEGATIONS**

29. At all time pertinent hereto, including on or about April 20, 2010, Petitioners were the owners, managing owners, owners *pro hac vice*, charterers, supervisors and/or operator of the oil rig Deepwater Horizon, and participated in the Deepwater Horizon's offshore oil drilling operations at in Mississippi Canyon Block 252, the location known as "Macondo," in the Gulf of Mexico.

30. At all times pertinent hereto, including on or about April 20, 2010, the Deepwater Horizon was a movable drilling rig and a vessel in navigation upon the navigable waters of the United States off the coast of Louisiana.

31. The Deepwater Horizon was a \$560,000,000 dynamically-positioned, semi-submersible deepwater drilling vessel built for Petitioners and put into service in February 2001.

32. At all times pertinent hereto, the Deepwater Horizon was owned by Petitioners and leased to BP Exploration & Production, Inc. (for purposes of this pleading, "BP") for drilling exploratory wells at the Macondo prospect site.

33. As part of their agreement with BP, Petitioners provided employees, contractors, and other officials who assisted Halliburton Energy Services, Inc. ("Halliburton"), the company engaged as the cementing advisor and cement product and equipment provider for the Macondo well in their oil exploration and drilling activities at the Macondo site.

34. On or about April 20, 2010, during drilling operations at the Macondo site, a blowout, explosions, and fire occurred aboard the Deepwater Horizon which resulted in the

sinking of the vessel and an oil spill (the “Spill”), that has caused, and will continue to cause, devastating damage.

35. The blowout, explosions, fire, and Spill were caused and/or contributed to by the Petitioners’ negligence, gross negligence, and reckless, willful and wanton conduct, as set forth below.

**A. A Series of Reckless Decisions Leading Up To The Blowout**

36. At the time of the blowout, drilling at Macondo was months behind schedule and over budget, and Petitioners repeatedly chose to violate industry guidelines and government regulations, and ignore warnings from their own employees and contractors on board the vessel to reduce costs and save time.

37. Before the blowout, Petitioners made and/or acquiesced to a host of reckless decisions concerning well design, cementing, and integrity testing that prioritized speed and cost-savings over safety and industry best practices.

38. Petitioners chose and/or acquiesced to BP’s choice of a “long string” casing system as opposed to a “liner/tieback” design, which would have provided more barriers against blowouts. Petitioners knew that the long string design was a risky option and that it was especially inappropriate for a well as difficult as Macondo.

39. Petitioners chose and/or acquiesced to BP’s choice of metal casings, which they knew or should have known might collapse under the high pressure surrounding the well.

40. Petitioners decided and/or acquiesced to BP’s decision to use only six centralizers (which are used to ensure that the casing is centered in the well), despite their knowledge that the

use of too few centralizers presented a severe risk that the cement job would fail to create a proper seal and cause a gas flow problem.

41. Petitioners also decided and/or acquiesced to BP's decision not to use a "bottoms up" circulation of drilling mud which would have allowed for testing the mud for gas influx, release of gas pockets, and removal of debris from the bottom of the well so that the cement would not become contaminated. A bottoms up circulation could have revealed the severity of the situation at Macondo before disaster struck.

42. Petitioners further acquiesced to the faulty cementing job performed by Halliburton, despite its actual or constructive knowledge that Halliburton's foam cement slurry design would be unstable.

43. Petitioners had actual and/or constructive knowledge before the Spill that a negative pressure test indicated that the cement had failed to form a seal at the casing nearest the hydrocarbon reservoir. Petitioners, however, elected to ignore the ominous testing results, and continue with the plan to seal the well as if the cement job had been a success.

44. Petitioners also decided and/or acquiesced to the decision to cancel a crucial cement bond log test, in violation of industry standard and MMS regulation. The cement bond log test would have determined the integrity of the cement job.

45. Petitioners also decided and/or acquiesced to the decision not to deploy the casing hanger lockdown sleeve, which ties down the top of a well and provides an extra layer of protection against a blowout, and would have prevented the wellhead seal from being blown out by pressure from below, as it ultimately was on April 20, 2010.

46. Petitioners also decided and/or acquiesced to the decision to use an abnormally large quantity of mixed and untested spacer material, which confounded the results of later pressure tests and adversely affected the functioning of the blowout preventer (the “BOP”), a subsea device installed for the purpose of closing the well in the event of an emergency, which was at all material times herein, an appurtenance of the vessel and part of its equipment.

47. Petitioners also decided and/or acquiesced to the decision to perform simultaneous operations on the Deepwater Horizon in an effort to expedite the project, which caused rig workers to become distracted and fail to take heed of the alarming signs of imbalance in the well. A few hours after the mud displacement process began at noon, Petitioners began a four-hour offload of mud to the nearby supply vessel M/V Damon Bankston. There is no evidence that Petitioners had any reason to perform these activities during the mud displacement process other than time savings.

**B. The Final Hours – The Blowout, Explosions, Fire, and Spill**

48. Pressure data from the vessel in the two-hour period before the explosions, during the process of displacing drilling mud with seawater, should have put Petitioners on notice that there was a problem and that pressure was building in the wellbore, yet Petitioners completely ignored this additional red flag and simply carried on displacing the drilling mud. At 8:52 p.m., the pumps displacing the mud with seawater were slowed, but instead of flow out of the well decreasing as expected, it increased — a clear “red flag” indicating that hydrocarbon pressure from the reservoir below was pushing the mud out of the well faster than the seawater that was supposed to be displacing the mud was being pumped in. Yet Petitioners appear to have

completely ignored this red flag and simply carried on with the mud displacement process.

49. By 9:08 p.m., 39 barrels of hydrocarbons had leaked into the well, but Petitioners still had not noticed the pressure and flow indications of the influx. It was not until 9:41 p.m., a scant four minutes before the blowout, that Petitioners finally noticed that the well was filling with hydrocarbons and immediate well control action was needed.

50. From 9:08 p.m. to 9:30 p.m. drill pipe pressure continued to increase, with hydrocarbons were flowing into the well at about nine barrels per minute. The pressure data should have prompted the Petitioners to start well kill operations to restore control over the pressure, but instead it was ignored or overlooked.

51. The mud pumps were shut down completely at around 9:30 p.m., at which point hydrocarbons had been continuously flowing into the well for 38 minutes. Modeling data from BP's disaster investigation showed that about 300 barrels of hydrocarbons had flowed into the well by this time. The hydrocarbons entered the riser through the wide-open BOP at 9:38 pm.

52. While Petitioners' crew was distractedly working miles above, highly-pressurized hydrocarbons leaked in through the bottom of the casing and into the casing string, rising up the casing through the BOP and riser to the surface.

53. Mud began spilling out of the riser onto the vessel floor at 9:40 p.m., 48 minutes after the leak had started at the bottom of the well. This was apparently the first sign of hydrocarbon influx that Petitioners noticed.

54. Petitioners' policies and instructions regarding well control procedures in emergencies addressed relatively small influxes, and were therefore woefully inadequate to

provide guidance to the crew as the mud spewed out of the riser. At 9:41 p.m., the vessel crew reacted to the flowing mud by diverting it from the well into the mud-gas separator, a device used to separate gas out of the drilling fluid and vent it safely into the air in the event of a kick; this only exacerbated the disaster, because the venting pipes on the mud-gas separator vented gas downwards toward the vessel, spreading gas all over the vessel and overwhelming the separator entirely. As a result, at 9:49 p.m., the Deepwater Horizon's drill floor ignited into a deadly blast of flames.

55. Investigations and testimony suggest that the initial explosion on the Deepwater Horizon on the night of April 20, 2010, was caused by an engine on the rig deck that sucked in the gas vapors blasting out of the well and began to rev uncontrollably.

56. Gas sensors, which shut down rig engines when dangerous vapors are present, are critical to preventing explosions in such situations. However, the gas sensors on the Deepwater Horizon were not operational on the night of the blowout.

57. In addition, the air intake valves, which should have closed upon sensing gas entering the engine room, failed to operate.

58. Moreover, the engine room was not equipped with a gas alarm system that could have shut off the power. The installation and maintenance of these sensors, alarms, and emergency shutdown systems were Petitioners' responsibility.

59. Eleven crewmembers were killed as the fire spread. The rig's Emergency Disconnect System, which was designed to separate the vessel from the riser in case of an emergency such as an explosion, failed to activate. As a result, gas continued to rush up

uncontrollably through the riser and feed the raging fire on the Deepwater Horizon platform.

60. The vessel burned for two days before it sank to the ocean floor. As it sank, the long riser pipe connecting it to the wellhead on the seafloor bent and broke, causing the blown-out well to spew oil into the Gulf waters at a rate of tens of thousands of barrels per day.

61. The Deepwater Horizon Study Group found no evidence that any of the rig workers or onshore employees directly involved with the Macondo well had formal training or qualifications in risk assessment and management of complex systems such as found aboard the Deepwater Horizon.

**C. The Failure of the Poorly-Maintained Blowout Preventer and Petitioners' Knowledge of its Defects, Deficiencies, and Vulnerabilities Before the Blowout**

62. Immediately after the explosion, desperate rig workers tried in vain to activate the BOP, which had been installed at the wellhead on the sea floor early in the drilling process to obstruct an uncontrolled gas or oil surge in just such an emergency.

63. The BOP was equipped with a "blind shear ram," which, when activated, was supposed to shear the drill pipe and seal the wellbore. Closure of the blind shear ram was the only way to isolate the well at the BOP.

64. There were two emergency methods available to rig personnel to close the blind shear ram from the vessel. One was a high-pressure closure of the blind shear ram, and the other was the emergency disconnect sequence (EDS). Both methods could be activated by pushing buttons on the BOP control panel on the vessel, and both required communication between the vessel and the BOP through multiplex cables running from the vessel to the BOP. The fire and



explosions on board the Deepwater Horizon disabled both of these methods, because the multiplex cables were not protected against explosions or fire; hence, the rig workers were unable to communicate with the BOP.

65. Petitioners' subsea supervisor, Christopher Pleasant, pressed the EDS button after the explosion, but the EDS failed to initiate, indicating that the explosion and fire damaged the multiplex cables to the extent that the communication line and electrical power necessary to initiate these functions was no longer available to rig workers.

66. The BOP was also equipped with two other emergency methods of sealing the wellbore: the automatic mode function ("AMF", or "deadman switch"), and activation by remotely operated vehicles (ROVs) on the seafloor using the "hot stab" or autoshear functions.

67. The AMF sequence activates the blind shear ram to shear the drill pipe and seal the wellbore in the event of a catastrophic failure of the riser. It is initiated if certain conditions, including the loss of electrical power, communications and hydraulic power, are met. At least one of the BOP's control pods must be operational for the AMF sequence to function. Each of the conditions necessary to initiate the AMF sequence was certainly met when the unprotected multiplex cables and hydraulic conduit hose were damaged by explosions and/or fire; however, because both of the pods had insufficient battery charge and one pod had a failed solenoid valve, neither pod was capable of completing an AMF sequence.

68. Petitioners' BOP maintenance records from 2001 to 2010 indicate that the control pod batteries were changed far less frequently than the manufacturer's recommended annual replacement. Unlike the solenoid valve failure, the BOP's diagnostic function did not measure

battery charge, all the more reason for Petitioners to change the batteries frequently to avoid failure. The records indicate that in December 2007, the batteries in one of the pods was fully depleted when the BOP was brought to the surface.

69. After the explosions, as the vessel was burning on the surface, emergency responders sent ROVs to the sea floor to attempt to close the blind shear ram using the “hot stab” or autoshear functions. An ROV performs a hot stab by injecting hydraulic fluid into dedicated ports on the BOP, bypassing the usual methods for activating BOP functions like the blind shear ram. Several hot stab attempts to close the blind shear ram failed due to insufficient hydraulic pressure. Over the course of these events, several leaks were discovered in the BOP’s hydraulic system, as well as incorrect hydraulic plumbing from the ROV intervention panel to the pipe rams, which was likely the result of aftermarket BOP modifications.

70. Ultimately, six leaks were discovered in the hydraulic system of the BOP. Petitioners were aware of at least two, but likely almost all, of these leaks prior to April 20, 2010. One such leak was discovered as early as February 2010, but was never repaired or otherwise addressed.

71. Also, there was no indication that the AMF and ROV intervention systems were tested at the surface, as required by Petitioners’ testing policy, prior to the BOP’s deployment on the well.

72. Petitioners were also aware of the aftermarket modifications that hindered the emergency responders’ ability to activate the BOP via hot stab procedures. In addition to the incorrect aftermarket hydraulic plumbing, Petitioners had switched out one of the Deepwater

Horizon's variable bore rams with a test ram. However, because Petitioners failed to update the BOP's schematic diagram to reflect the aftermarket changes, in violation of 29 C.F.R. § 1910.119, which requires, inter alia, up-to-date process and safety system equipment drawings as a part of basic process safety management, emergency responders spent a day futilely trying to close a variable bore ram, not knowing it had been replaced with a useless test part.

73. Despite rig workers' efforts just after the blowout, and emergency engineers' efforts in the weeks after the blowout and sinking, the Deepwater Horizon's blind shear ram never successfully sealed the well, and investigations since the blowout have been unable to determine why it failed to do so. Because the official investigation of the BOP retrieved from the seafloor is still ongoing, Claimants reserve the right to amend their Master Claim once further information from that and any other investigations becomes available.

74. At the time of the disaster, the Petitioners were certainly aware that in addition to increasing the risk of blowouts, deep-sea drilling also increases the risk of BOP failure. Despite being aware of the risk of the BOP failing at greater depths, Petitioners did not install backup BOP activation systems, backup BOPs or other secondary redundant precautionary measures available to protect the vessel, its workers, Plaintiffs, and the environment from the catastrophic results of a well blowout.

75. Inasmuch as all of the methods available to seal the well by way of the BOP rely on a properly-functioning blind shear ram, it is critical that a BOP be equipped with redundant features in the event the blind shear ram fails. This is particularly true since blind shear rams are vulnerable to a "single-point failure," meaning that if just one of the small shuttle valves that

carry hydraulic fluid to the ram blades jams, the BOP will be unable to seal the well. In a 2000 report on the Deepwater Horizon's BOP, consultants attributed 56 percent of the BOP's "failure likelihood" to this one small valve. Indeed, evidence suggests that when the crew attempted to activate the Deepwater Horizon's BOP's blind shear ram, the blades could not cut the drill pipe because one or more of the shuttle valves leaked hydraulic fluid.

76. Because BOPs are vulnerable to single-point failure, offshore drillers now commonly equip their BOPs with two blind ram shears. In fact, when the Deepwater Horizon went into service in 2001, Petitioners were already equipping their new rigs with BOPs that could accommodate two blind shear rams, and today eleven of Petitioners' fourteen rigs operating in the Gulf of Mexico have two blind shear rams. On the Deepwater Horizon, however, Petitioners failed to ensure that the BOP had sufficient, functional built-in redundancy to eliminate single-point failure modes.

77. Petitioners failed to ensure that all foreseeable repairs, if any, and foreseeable modifications, if any, to the Deepwater Horizon's BOP were performed, completed, and tested with the vessel's operations shut down and the well secured.

78. Petitioners failed to ensure the testing, if any, of the Deepwater Horizon's BOP was comprehensive, reviewed, and verified, and further failed to check and verify the BOP's entire operating and control system, including but not limited to, checking for leaks at ROV connection points, and verifying the functionality of the AMF, autoshear, or ROV "hot stab" connection points.

79. Petitioners failed to ensure that the BOP present on the Deepwater Horizon

possessed reasonably safe, adequate, functional technology to prevent foreseeable blowouts.

80. Petitioners could have ensured that a BOP and/or back-up BOP with sufficient strength for deepwater drilling was present and available on the Deepwater Horizon, but did not do so.

81. Petitioners could have installed a back-up trigger to activate the Deepwater Horizon's BOP in the event that the main trigger failed to activate.

82. Petitioners were aware that in addition to increasing the risk of blowouts, deep-sea drilling also increases the BOP failure risk. Despite being aware of the risk of the BOP failing at greater depths, Petitioners did not install backup BOP activation systems, backup BOPs or other secondary redundant precautionary measures available to protect the vessel, its workers, Claimants, and the environment from the catastrophic results of a well blowout.

83. Moreover, during drilling operations at Macondo, the Deepwater Horizon's BOP was out of certification and long overdue for extensive maintenance and repair. It had not undergone a thorough series of maintenance checks since 2005, despite the significant problems uncovered within the device during that inspection. Moreover, although the BOP's manufacturer required that the device undergo testing by the manufacturer every five years, the Deepwater Horizon's BOP had not been inspected by its manufacturer since 2000.

84. According to Petitioners' maintenance documents from the 2005 inspection, the BOP's control panels gave unusual pressure readings and flashed inexplicable alarm signals, while a "hot line" connecting the vessel to the BOP was leaking fluid badly. An independent engineering company was hired to assess the BOP, but could not perform all of its examinations,

including verification that the BOP could effectively shear drill pipe and seal off wells in high pressure, deepwater conditions, because the BOP was in use and inaccessible on the sea floor, and Petitioners would not stop work to bring it to the surface.

85. An independent audit of the vessel commissioned by Petitioners in April 2010, just before the explosion, revealed a range of problems with the Deepwater Horizon's BOP, including a leaking door seal, pump parts needing replacement, error-response messages, and "extraordinary difficulties" surrounding the maintenance of the BOP's annular valves. BP well site leader Ronald Sepulvado testified in August 2010 that he too had raised concerns about Petitioners' maintenance of the BOP, reporting that several pieces of equipment had been out of service for extended periods of time, but that Petitioners "always told [him] that they didn't have the parts" to make the necessary repairs.

86. In fact, federal regulators at the MMS communicated to Petitioners in 2000 that MMS considered a backup BOP activation system to be "an essential component of a deepwater drilling system." Despite this notice, and although the backup BOP trigger is a common drill-rig requirement in other oil producing nations, including other areas where the Petitioners operate, the Deepwater Horizon was not equipped with this backup remote BOP trigger.

87. If the BOP on the wellhead had been functional and properly maintained and/or equipped by Petitioners, it could have been manually or automatically activated right after the explosion, cutting off the flow of oil at the wellhead, limiting the Spill to a minute fraction of its ultimate severity and thereby sparing Claimants millions of dollars in losses and damage.

**D. Petitioners' Knowledge of Other Safety, Operational, Equipment, and Maintenance Issues on the Deepwater Horizon Before the Blowout**

88. Prior to the blowout, Petitioners had actual knowledge that improving safety performance during offshore drilling operations was necessary. As Steven L. Newman, chief executive of Defendant Transocean Holdings LLP, admitted prior to the Spill, “we have to improve our safety performance.”

89. Prior to the blowout, Petitioners had actual and/or constructive knowledge of significant problems related to the Deepwater Horizon’s equipment and maintenance, including the electronic alarm systems, and the ballast systems used to stabilize the vessel in the water.

90. Prior to the blowout, Petitioners had actual knowledge, based on an independent equipment assessment they had commissioned, that the Deepwater Horizon had significant deficiencies in at least 36 pieces of “critical equipment items” that could “lead to loss of life, serious injury or environmental damage as a result of inadequate use and/or failure of equipment.”

91. The investigators also found problems with the vessel’s ballast system that they noted could directly affect the stability of the ship. The vessel also had a malfunctioning pressure gauge and multiple leaking parts. The report faulted the decision to use a type of sealant “proven to be a major cause of pump bearing failure.”

92. The equipment assessment commissioned by Petitioners echoed the results of a similar BP-commissioned audit conducted in September 2009, which found that Petitioners had “overdue planned maintenance considered excessive — 390 jobs amounting to 3,545 man hours

[of needed maintenance work].”

93. In addition, in the weeks before the disaster, the vessel experienced power blackouts, computer glitches and a balky propulsion system. In some cases, Petitioners’ officers even purposely overrode or disabled vital safety mechanisms.

94. Rig-wide electrical failures had occurred two or three times before the blowout, and the driller’s control chair had lost power just a few days prior to the blowout. The primary computer used to control all vessel drilling functions routinely crashed and had to be restarted, interfering with workers’ ability to monitor well data. One of the vessel’s thrusters, an underwater propeller that helps the floating vessel move and stabilize itself in the water, had been “having problems” for eight months prior to the blowout.

95. Further, the computerized system used to monitor routine maintenance aboard the vessel was not working optimally because glitches from a recent computer system migration had not yet been resolved. Sometimes the computer called for maintenance to be done on equipment that did not exist aboard the vessel, while some pieces of equipment that were aboard the vessel and in need of maintenance were not registered by the computer.

96. Petitioners bypassed or disabled key safety systems on the vessel, including a gas safety valve and the fire alarm system, that were intended to monitor for fire and explosive and toxic gases, with utter disregard for the safety ramifications.

97. Had Petitioners not disabled the alarm systems, the system would have sounded before the explosion, shut down all potential ignition sources, and activated the drilling vessel’s emergency disconnect system, which would have prevented the explosion and saved the lives of



the 11 vessel workers who perished and prevented the multiple personal injuries resulting from the disaster.

98. Petitioners' entire fleet bypassed certain vital safety systems as a matter of practice. Also, Petitioners' workers were inexperienced and too readily promoted without sufficient on-the-job training to fully recognize and appreciate the risks. Fake data entered into Petitioners' program for tracking health and safety issues provided a distorted picture of safety on the vessel.

99. When the Deepwater Horizon lost power during the blowout, none of the backup or emergency generators that were on board to provide power to alarm and safety systems in just such an emergency were working. There was no general alarm, no internal communication, and no power to the vessel's engines.

100. Without power, the crew was also unable to engage the Emergency Disconnect System that would have halted the flow of gas fueling the fire on the vessel, and many other alarm and safety systems were rendered silent and useless.

101. In a confidential worker survey conducted on the Deepwater Horizon in the weeks before the disaster, workers voiced concerns about poor equipment reliability, and one worker noted that the vessel had not once in its nine-year career been taken to dry dock for necessary repairs. As he stated, "we can only work around so much." Another worker described Petitioners' policy of running equipment ragged before making even the bare minimum of repairs. As he explained, "[r]un it, break it, fix it. ... That's how they work."

102. The Deepwater Horizon disaster was "entirely preventable," according to one of

the world's leading experts on oil well management, Dr. Nansen Saleri. "There are many ... redundant elements in a robust safety management system," Saleri said. "The first line of defense is not ever to let that kind of pressure build up. The reason this happened was a series of bad decisions about the well that are human-based and that completely disregarded the risks." At bottom, "[t]he whole episode was systemic failure on a grand scale."

103. All of the facts alleged herein were within the privity or knowledge of Petitioners before the blowout, explosions, and Spill.

**E. The Spill's Impact on Claimants**

104. The Spill has impacted and continues to impact the Gulf Coast and the shorelines of Florida, Alabama, Mississippi, Texas, and Louisiana. The Spill has grievously harmed the beaches, shores, marshes, harbors, estuaries, bayous, bays, and waters in Florida, Alabama, Mississippi, Texas, and Louisiana.

105. The Spill and the resulting contamination have caused and will continue to cause loss of revenue to individuals and businesses that cannot use the Gulf of Mexico and the coasts of Louisiana, Texas, Mississippi, Alabama, and Florida to work and earn a living, thereby causing a loss of revenue to Claimants.

106. Major shrimp species in the Gulf of Mexico, including white, pink, and brown shrimp, are mainly located in coastal areas. During the Spill, these species were harmed due to mortality of adults, as well as that of postlarval shrimp, whose migrations out of inshore waters coincided precisely with the Spill, devastating current as well as future shrimp catches. In 2009, Gulf region shrimp landings were the nation's largest with 241 million pounds, which was 80

percent of the national total and worth \$313.8 million, according to NOAA sources.

107. According to NOAA, the Gulf region also leads the nation in the production of oysters in 2009, harvesting 22.1 million pounds of meats, a catch worth almost \$85 million and making up over 62 percent of the nation's total.

108. In 2009, the Gulf region harvested almost 40% of the nation's blue crab catch: 59.1 million pounds of hard blue crab landings worth \$57.3 million, according to the National Marine Fisheries Service. Louisiana alone landed approximately 33 percent of the total national blue crab catch: 50.78 million pounds, a catch worth \$49.17 million.

109. The Spill has not only had a potentially severe impact on fisheries in the Gulf, but it has also dealt a devastating blow to tourism in the region and the individuals and businesses that ordinarily thrive on tourism and tourism-related business, which accounts for about 46 percent of the Gulf Coast economy. The Spill will result in at least \$7.6 billion in lost tourism revenue in 2010, according to a study done for the U.S. Travel Association.

110. The Spill may become the worst disaster in the history of Florida tourism. Some analysts have preliminarily estimated that the impact on tourism along Florida's Paradise Coast could reach \$3 billion.

111. Because of the Spill, the Mississippi coast has had a 50 percent cancellation rate on reservations generally.

112. Twenty-six percent of Americans who had planned to visit Louisiana stated they were no longer planning to visit after the Spill, according to a nationwide survey taken by the Louisiana Tourism Commission in May 2010. Prior to the Spill, Louisiana hosted 24.1 million

visitors per year, which supported a \$9.4 billion tourism industry and sustained more than 200,000 direct and indirect jobs for Gulf residents, according to the Louisiana Tourism Commission.

113. In addition, Alabama has seen a dramatic drop in tourism, including a 60 percent drop in visitations and an 80 percent drop in home rentals. Overall, the combination of tourism and fishing losses in Alabama in 2010 will probably yield adverse impacts of \$1.7 billion in economic output, \$498.9 million in earnings, and 24,880 jobs, according to a report by the Center for Business and Economic Research at the University of Alabama.

114. The foregoing losses in the private sector have caused severe damage to Claimants in the form of lost income and tax revenues. Claimants have also lost royalties, rents, fees and net profit shares as a result of the Spill.

115. Some Claimants own or lease real property, and have suffered the loss, destruction, and/or diminution in value of their property as a result of the Spill.

116. The Spill also required dramatic increases in expenditures for public services, including additional administrative costs, costs of additional personnel, and out-of-pocket costs incurred for material and equipment.

117. Claimants also incurred the costs of response, removal, clean-up, restoration and/or remediation after the Spill. These costs include increased personnel salary costs, overtime travel and per diem expenses; costs for use of government-owned equipment and facilities, and actual expenses for goods and/or services supplied by contractors and/or vendors.

## **CLAIMS**

### **I. Negligence**

118. Claimants reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

119. As the owners, managing owners, owners *pro hac vice*, charters, supervisors and/or operators of the Deepwater Horizon, Petitioners owed duties of care to Claimants to, *inter alia*, navigate, man, possess, manage, control, maintain and operate the Deepwater Horizon with reasonable and ordinary care.

120. Petitioners were under a duty to exercise reasonable care while participating in drilling operations to ensure that an oil spill did not occur.

121. Petitioners were also under a duty imposed by their discharge permit not to release any oil into the navigable waters of the United States.

122. Petitioners breached their duties to Claimants by, *inter alia*, failing to properly manage, control, maintain and operate the Deepwater Horizon and its safety equipment, including the gas sensors, air intake valves, emergency shut down systems, and BOP, and in disabling vital alarm systems on the Deepwater Horizon before the blowout.

123. Petitioners also breached their duties to Claimants by making and/or acquiescing to a series of reckless decisions concerning, *inter alia*, well design, the use of centralizers, mudding operations, cementing, integrity testing, deployment of the casing hanger lockdown sleeve, spacer material, simultaneous and distracting operations, and diversion of the flowing mud to the mud-gas separator.

124. In addition, Petitioners breached their duties to Claimants in the following non-exclusive particulars:

- (a) Failing to properly operate the Deepwater Horizon;
- (b) Operating the Deepwater Horizon in such a manner that a fire and explosions occurred onboard, causing it to sink and resulting in the Spill;
- (c) Failing to properly inspect the Deepwater Horizon to assure that its equipment and personnel were fit for their intended purposes;
- (d) Failing to properly assess the risk of failure of key safety and emergency equipment;
- (e) Acting in a careless and negligent manner without due regard for the safety of others;
- (f) Failing to implement and enforce rules and regulations pertaining to the safe operations of the Deepwater Horizon which, if they had been so implemented and enforced, would have averted the blowout, explosions, fire, sinking, and Spill;
- (g) Operating the Deepwater Horizon with untrained and unlicensed personnel;
- (h) Negligently hiring, retaining and/or training personnel;
- (i) Failing to take appropriate action to avoid or mitigate the accident;
- (j) Negligently implementing or failing to implement policies and procedures to safely conduct offshore operations in the Gulf of Mexico;

- (k) Failing to warn in a timely manner;
- (l) Failing to timely bring the oil release under control;
- (m) Failing to provide appropriate accident prevention equipment;
- (n) Failing to observe and read gauges that would have indicated excessive pressures in the well;
- (o) Failing to react to danger signs; and
- (p) Such other acts of negligence and omissions as will be shown at the trial of this matter; all of which acts are in violation of the general maritime law.

125. Petitioners knew of the dangers associated with deep water drilling and failed to take appropriate measures to prevent damage to Claimants and the Gulf of Mexico's marine and coastal environments and estuarine areas.

126. Petitioners knew or should have known that the acts and omissions described herein could result in damage to Claimants.

127. The injuries to Claimants were also caused by or aggravated by the fact that Petitioners failed to take necessary actions to mitigate the danger associated with their operations.

128. The Petitioners' conduct with regard to the maintenance and/or operation of drilling operations and oil vessels such as the Deepwater Horizon is governed by numerous state and federal laws and permits issued under the authority of these laws, including its water discharge permit that prohibited the release of any free oil into the environment. These laws and

permits create statutory standards that are intended to protect and benefit Claimants. Petitioners violated these statutory standards.

129. Petitioners also violated the International Safety and Management Code (“ISM”), as adopted by the International Convention for the Safety at Life at Sea (“SOLAS”), which provides rules and standards to ensure that ships are constructed, equipped, and manned to safeguard life at sea, by failing to properly maintain the vessel, train personnel, and perform appropriate risk assessment analyses. *See* 46 USC §§ 3201-3205 and 33 CFR §§ 96.230 and 96.250.

130. In addition to the negligent actions described herein, and in the alternative thereto, the injuries and damages suffered by Claimants were caused by the acts and/or omissions of the Petitioners that are beyond proof by the Claimants, but which were within the knowledge and control of the Petitioners, there being no other possible conclusion than that the blowout, explosions, fire, sinking, and Spill resulted from the negligence of Petitioners. The blowout, explosions, fire, sinking, and the resulting Spill would not have occurred had the Petitioners satisfied the duty of care imposed on them and Claimants, therefore, plead the doctrine of *res ipsa loquitur*.

131. Claimants are entitled to a judgment finding Petitioners liable to Claimants for damages suffered as a result of Petitioners’ negligence and awarding Claimants adequate compensation therefor in amounts determined by the trier of fact.

132. As a result of Petitioners’ acts or omissions, Claimants have suffered damage, destruction, and/or diminution in value of property, loss of tax revenue, income and/or use of



property, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, or costs.

## **II. Gross Negligence and Willful Misconduct**

133. Claimants reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

134. Petitioners owed and breached duties of ordinary and reasonable care to Claimants in connection with the maintenance and operation of the Deepwater Horizon, and additionally owed and breached duties to Claimants to guard against and/or prevent the risk of the Spill which occurred herein. The existence and breach of these legal duties are established under the General Maritime Law and state law as deemed applicable herein.

135. Petitioners failed to exercise reasonable care. Moreover, given the grave risks incident to their operations and the many cavalier ways in which Petitioners ignored those risks in the interest of speedy operations and greater profits, Petitioners conduct was grossly negligent. Petitioners' conduct showed their repeated and conscious disregard of high risks of harm to others; such conduct amounted to reckless and willful misconduct.

136. Petitioners acted with gross negligence, willful misconduct, and reckless disregard for human life and the safety and health of the environment and Plaintiffs by, *inter alia*, disabling the gas alarm system aboard the Deepwater Horizon.

137. Petitioners acted with gross negligence, willful misconduct, and reckless disregard for human life and the safety and health of the environment and Claimants by making or acquiescing to a number of reckless decisions on the Deepwater Horizon, including, *inter alia*,

failing to use a sufficient number of “centralizers” to prevent channeling during the cement process; failing to run a bottoms up circulation of the drilling mud prior to beginning the cement job; disregarding proper drilling, casing, mudding, and cementing procedures; failing to ensure that adequate safeguards, protocols, procedures and resources would be readily available to prevent and/or mitigate the effects an uncontrolled oil spill into the waters of the Gulf of Mexico.

138. In addition, Petitioners acted with gross negligence, willful misconduct, and reckless disregard for human life and the safety and health of the environment and Claimants by making or acquiescing to reckless decisions to, *inter alia*, use an inappropriate cement mixture for the well; test that cement mixture prior to using it in the well; run a cement bond log to evaluate the integrity of the cement job; and deploy the casing hanger lockdown sleeve prior to commencing the mud displacement process in the well.

139. Petitioners acted with gross negligence, willful misconduct, and reckless disregard for human life and the safety and health of the environment and Claimants by, *inter alia*, recklessly maintaining and/or altering, and/or wantonly operating and/or using the BOP appurtenant to the Deepwater Horizon.

140. As a result of Petitioners’ gross negligence and/or willful and/or wanton conduct, Claimants have suffered damage, destruction, and/or diminution in value of property, loss of tax revenue, income and/or use, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, or costs.

### **III. Public Nuisance**

141. Claimants reallege each and every allegation set forth in all preceding paragraphs

as if fully restated here.

142. Petitioners' negligence caused and/or contributed to the blowout and subsequent Spill that invaded and polluted the public waters of the States of Florida, Alabama, Mississippi, Louisiana, and Texas, damaging all persons who came within the sphere of its operation, including the cities, towns, counties, villages, parishes, and municipalities near the Gulf, resulting in a devastating economic and ecological disaster that has interfered and will continue to interfere with the Claimants' interests and the use and enjoyment of the waters, property, estuaries, seabeds, animals, plants, beaches, shorelines, coastlines, islands, marshlands, and other natural and economic resources of the foregoing states, which constitutes a public nuisance under Florida, Alabama, Mississippi, Louisiana and Texas law.

143. Petitioners acted in an unreasonable manner in creating the nuisance described herein.

144. As a direct and proximate result of the creation and continuing creation of a public nuisance, Claimants have suffered past, present, and future damages, including, but not limited to, inconvenience, loss of income, loss of revenue, and a substantial increase in expenditures by the Claimants to combat, abate, and remedy the effects of the nuisance caused by the Petitioners.

145. As a direct and proximate result of the Petitioners' creation of a public nuisance, and their failure to perform their duties and obligations, Claimants have suffered and will continue to suffer losses and damages including, *inter alia*, those necessary to pay for services to protect the public health and the environment on behalf of their citizens, as well as

inconvenience, loss of beneficial use, enjoyment, and exclusive possession of property, damage, destruction, and/or diminution in value of property, loss of tax revenue, income and/or use, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, or costs, for which Claimants are entitled to be compensated.

146. As a result of the Spill, Petitioners also each liable for the killing of fish, wild birds, wild quadrupeds, and other wildlife and aquatic life, in violation of La. R.S. 56:40.1, *et seq.* The District Attorney for the Parish in which the violation occurred is authorized, pursuant to La. R.S. 56:40.4, to bring an action to recover penalties for the value of each fish, each wild bird, each wild quadruped, and other wildlife and aquatic life unlawfully killed, taken, caught, possessed or injured as a result of the conduct of Petitioners. Petitioners are therefore liable for the value of fish, each wild bird, each wild quadruped, and other wildlife and aquatic life unlawfully killed, taken, caught, possessed or injured, as determined in accordance with La. R.S. 56:40.2, and for attorneys' fees and costs of litigation, in accordance with La. R.S. 56:40.3(F), or otherwise as may be applicable by law.

147. Petitioners are liable to Claimants to take all appropriate actions to remedy and abate the harm to the environment and public health caused by the public nuisance they created, and any other relief the Court deems just and appropriate.

#### **IV. Nuisance**

148. Claimants reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

149. Petitioners' negligence caused and/or contributed to the blowout and subsequent

Spill which directly and proximately caused an invasion that has interfered with the use and enjoyment of the waters, property, estuaries, seabeds, animals, plants, beaches, shorelines, coastlines, islands, marshlands, and other natural and economic resources of the States of Florida, Alabama, Mississippi, Louisiana, and Texas, including the cities, towns, counties, villages, parishes, and municipalities near the Gulf, and have materially diminished and continue to diminish the value thereof, constituting a nuisance.

150. Petitioners were under a duty to take positive action to prevent or abate the interference, but failed to do so.

151. Petitioners' creation of a nuisance proximately caused past, present, and future damages to the Claimants by allowing oil, chemical dispersants, and other materials and substances to contaminate Claimants' property.

152. As a direct and proximate result of the Petitioners' creation of a nuisance, and their failure to perform their duties and obligations, Claimants have suffered and will continue to suffer damages and losses, including, *inter alia*, those necessary to pay for services to protect the public health and the environment on behalf of their citizens, as well as inconvenience, loss of beneficial use, enjoyment, and exclusive possession of property, damage, destruction, and/or diminution in value of property, loss of tax revenue, income and/or use, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, or costs, for which Claimants are entitled to compensation.

153. Petitioners are liable to Claimants to take all appropriate actions to remedy and abate the harm to the environment and public health caused by the public nuisance they created,

and any other relief the Court deems just and appropriate.

**V. Trespass**

154. Claimants reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

155. Petitioners discharged a foreign polluting substance beyond the boundaries of the States of Florida, Alabama, Mississippi, Louisiana, and Texas, which it knew to a substantial certainty would, in due course, invade and intrude upon Claimants' property, interfering with the Claimants' exclusive possessory rights and causing damage to the waters, property estuaries, seabeds, animals, plants, beaches, shorelines, coastlines, islands, marshland and other natural and economic resources, materially diminishing the value thereof.

156. The invasion and resulting damage to Claimants was reasonably foreseeable by Petitioners when they failed to exercise reasonable care in the design, execution, and operation of the Macondo well and the maintenance and operation of the Deepwater Horizon and its appurtenances and equipment, which conduct resulted in the entry, intrusion, or invasion on the Claimants' property.

157. This deliberate invasion and contamination of property owned by Claimants constitutes a trespass in violation of Florida, Alabama, Mississippi, Louisiana, and Texas law.

158. As a direct and proximate result of their unauthorized invasion, entry and contamination, Petitioners have caused and continue to cause losses and damage to the Claimants, including the creation of conditions harmful to human health and the environment, expenditures necessary to pay for services to protect the public health and the environment on

behalf of their citizens, as well as inconvenience, loss of exclusive possession of property, damage, destruction, and/or diminution in value of property, loss of tax revenue, income and/or use, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, or costs, for which Claimants are entitled to compensation.

159. The outrageous, malicious, rude, oppressive, grossly negligent, willful, reckless, and wanton conduct of Petitioners, as described herein, entitles Claimants to compensatory and punitive damages.

## **VI. Punitive Damages**

160. Claimants reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

161. Petitioners' conduct was oppressive, wanton, malicious, reckless, or grossly negligent each time they:

- (a) failed to properly maintain and/or operate the Deepwater Horizon;
- (b) operated the Deepwater Horizon in such a manner the safety and integrity of the vessel and the well were disregarded to save time and money;
- (c) ignored warnings that the integrity of the well, the cementing job, and the vessel were in jeopardy;
- (d) failed to implement, and enforce proper rules and regulations to ensure the safe operations of the Deepwater Horizon;
- (e) violated MMS regulations for the safe design and operation of oil wells and drilling vessels in the Gulf of Mexico;

- (f) failed to take appropriate action to avoid or mitigate the accident;
- (g) failed to implement policies and procedures to safely conduct offshore operations in the Gulf of Mexico;
- (h) failed to ensure that the Deepwater Horizon and its equipment were free from defects, properly maintained and/or in proper working order;
- (i) failed to provide appropriate disaster prevention equipment; and
- (j) failed to have an appropriate emergency spill response plan or readily available spill response equipment.

162. Petitioners' conduct, as described more fully hereinabove, is at the highest level of reprehensibility, warranting and necessitating the imposition of punitive damages at the highest level, because Petitioners' conduct was motivated by financial gain; because it injured and endangered human and environmental health and safety; because it caused devastating damage and loss to the livelihoods, businesses, and properties of Claimants; because it involved deliberate decisions that recklessly and callously disregarded or discounted risk of harm to persons, property, and the environment; because it was part of a culture and ongoing pattern of conduct that consistently and repeatedly ignored such risks to others in favor of financial advantage to Petitioners; and because it has accordingly caused societal harm, moral outrage and public condemnation, and the need to punish Petitioners and deter further repetition by Petitioners or others.

163. Accordingly, under the General Maritime Law (including, but not limited to, by virtue of the Admiralty Extension Act) and/or under applicable State Law, Claimants are entitled



to an award of punitive damages in an amount to be determined at trial.

**PRAYER FOR RELIEF**

WHEREFORE, Claimants demand judgment against Petitioners, jointly, severally, and solidarily, as follows:

- (a) Economic and compensatory damages in amounts to be determined at trial;
- (b) punitive damages;
- (c) civil and/or criminal penalties;
- (d) pre-judgment and post-judgment interest at the maximum rate allowable by law;
- (e) attorneys' fees and costs of litigation; and
- (f) Such other and further relief available under all applicable state and federal laws and any relief the Court deems just and appropriate.

**VOLUNTARY MASTER COMPLAINT, CROSS-CLAIM, AND THIRD-PARTY  
COMPLAINT FOR LOCAL GOVERNMENTAL ENTITIES**

**(PTO NO. 11 [CMO NO. 1] SECTION III(C) [“C BUNDLE”])**

**INTRODUCTION**

On April 20, 2010, a well blowout on the vessel Deepwater Horizon in the Gulf of Mexico marked the beginning of what would become the most pervasive and devastating environmental disaster in the history of the United States. The blowout and subsequent explosions, fire, and sinking of the vessel resulted in an oil spill of unprecedented proportions that damaged, depleted and destroyed marine, estuarine, and coastal environments in the Gulf of Mexico, Louisiana, Mississippi, Alabama, Texas, and Florida (the “Spill”). Although the blown-out well is now capped, the disastrous environmental and economic effects of the Spill are widespread and will likely remain so for decades.

Hundreds of individual and class actions were filed in state and federal courts on behalf of the thousands of victims of the Spill. By order entered on August 10, 2010, the Multi-district Litigation Panel (the “MDL Panel”) transferred all such actions then pending to this Court. *See In re Oil Spill by the Oil Rig “Deepwater Horizon” in the Gulf of Mexico, on April 20, 2010*, MDL No. 2179, 2010 WL 3166434, 2010 AMC 1977 (JPML, August 10, 2010) (the “Transfer Order”). On October 19, 2010, this Court entered its Case Management Order No. 1 (hereinafter “PTO 11”), wherein it defines “Bundle C” pleadings to include claims brought by local governmental entities for, *inter alia*, loss of resources, loss of tax revenue, property damages, response or restoration costs, and civil penalties.

This Master Complaint is a voluntary and administrative pleading which may hereinafter be joined by local government entities that desire to assert the claims described herein. This

Master Complaint is designated as an admiralty or maritime case as provided in Rule 9(h)(1) of the Federal Rules of Civil Procedure, and is filed as a voluntary procedural device made available to local governmental entities suing in their own name and/or in a representative capacity for loss of resources, loss of tax revenue, property damages, response or restoration costs, civil penalties, and/or other remedies and relief arising out of the Spill, and as a class action.

Local Governmental Entities who desire to assert claims in this MDL proceeding *via* this Master Complaint, both for themselves and all others similarly situated, (the members of the proposed Class and Subclasses), respectfully submit this Master Complaint, Cross-Claim and Third-Party Complaint for actual, compensatory, and punitive damages, and other available relief, arising from the well blowout, vessel explosions, and subsequent oil spill by the Deepwater Horizon oil vessel in the Gulf of Mexico on April 20, 2010, and state as follows:

164. On April 20, 2010, at approximately 9:45 p.m. CST, a well blowout caused explosions on the Deepwater Horizon, an oil vessel in the Gulf of Mexico, igniting a raging, gas-fueled fire on the vessel. After burning for two days, the vessel sank to the ocean floor.

165. As the Deepwater Horizon tipped into the sea, the long riser pipe connecting the vessel to the wellhead on the seafloor bent and broke, leaving the pipe leaking oil out of its now-open end as well as through two breaks along its length. An emergency valve, installed on the wellhead for just such a disaster, failed to seal the wellhead as it should have, causing the blown-out well to spew oil into the Gulf waters.

166. Each day during the course of the Spill, tens of thousands of barrels of crude oil gushed from the wellhead and broken riser, bubbling up to the surface and flattening out into a widening slick of oil, as well as spreading out in vast subsurface plumes. On the surface, the shifting smear was large enough to be visible from outer space, at times covering tens of

thousands of square miles, and spreading with the wind and currents towards the Gulf states' coastlines, where oil made landfall on white sand beaches and in ecologically sensitive marshes and estuaries, damaging the environment and real and personal property throughout the coastal zones of the Gulf states ("Coastal Zone"). Under water, huge plumes of oil and dispersant chemicals swirled through the entire water column and came to rest on the seafloor at many different depths, damaging ecosystems and privately owned and leased sea beds throughout the Gulf of Mexico.

167. The Deepwater Horizon's well blowout and the subsequent explosions, fire, sinking, and Spill were foreshadowed by a string of disastrous incidents and near misses in Defendants' operations on land and at sea, as well as poor decision-making by Defendants and their employees, as they ignored crucial safety issues, cut corners, and violated federal and state law to save time and money in favor of production and profit and at the expense of worker safety and environmental protection. All the while, Defendants continued to evade and subvert industry regulations.

168. Defendants could have prevented this catastrophe by using deepwater drilling best practices, following required safety protocols and precautionary procedures, properly maintaining equipment, and using widely available emergency safety technology but, with little regard for the risk to the vessel workers or the environment, Defendants chose to violate or ignore operational discipline, and save money and time at the expense of safety. Their cost-cutting measures were outrageous — consistent with their long corporate histories of flagrant disregard for safety — and were taken with willful, wanton, and reckless indifference to the disastrous results to the workers aboard the vessel, the environment, and Plaintiffs.

169. Defendants repeatedly made decisions impacting the safety of the vessel, its

workers, the environment, and the health, welfare, and value of the people, businesses, and property of the Gulf states in the direction of short-term gain, through reduced schedule and reduced cost, rejecting adequate and responsible risk analysis checks and balances to weigh cost and time versus risk and safety. The result was both predictable in outcome and unprecedented in scale. Moreover, because their conduct endangered the health and safety of a large region and population, caused and increased the risk of serious injury and bodily and emotional harm, and affected a financially vulnerable population dependent upon the Gulf of Mexico, the degree of reprehensibility of Defendants' conduct is at the highest level.

170. The Spill has caused, and continues to cause, devastating environmental and economic damage. For example, there have been thousands of square miles of waters closed to fishing, swimming and/or boating, and thousands of square miles of historic coastal marshes, delicate estuaries, cypress forests, barrier islands, and white sand beaches compromised. Fishermen and marine-related businesses have lost and continue to lose income and their businesses; the tourism industry and hotels, resorts, restaurants, and other tourism-reliant businesses have lost and continue to lose income; and real property owners have suffered the loss, damage, and/or diminution of the value of their properties throughout the Coastal Zone.

171. The loss of income and property damage sustained by private individuals and entities in the Canal Zone has had a severe economic impact on local governmental entities in the Gulf States in the form of, *inter alia*, loss of revenue, royalties, rents, fees and net profit shares due to the loss of real and personal property.

172. The Spill also caused Plaintiffs damage in the form of costs associated with increased public services, resulting in additional administrative costs, costs of additional personnel, out-of-pocket costs incurred for material and equipment; removal costs, including

personnel salary costs, overtime travel and per diem expenses; costs for use of government-owned equipment and facilities, and actual expenses for goods and/or services supplied by contractors and/or vendors.

173. In addition, certain local government entities own real and/or personal property that was lost, damaged, or diminished in value as a result of the Spill.

174. This Voluntary Master Complaint, Cross-Claim, and Third-Party Complaint is submitted as: (1) an administrative device to serve the functions of efficiency and economy; and (2) to afford Local Government Entities the opportunity to present certain common claims and common questions of fact and law for appropriate action by this Court, including class certification and trial, in the context of this multidistrict proceeding.

175. This Voluntary Master Complaint, Cross-Claim, and Third-Party Complaint does not constitute a waiver or dismissal of any actions or claims asserted in the individual and class actions arising out of the Spill, nor by it do the Plaintiffs relinquish the right to add or assert, or seek leave to add or assert, additional claims, or name additional parties defendant, depending on further information learned through discovery or investigation.

176. This Voluntary Master Complaint, Cross-Claim, and Third-Party Complaint makes allegations of, and places Defendants on notice that Plaintiffs may seek, certification of one or more classes and/or subclasses, as appropriate, for the classwide determination of common issues of law and/or fact relating to the liability of Defendants to the members of such classes and/or subclasses for actual, compensatory, and punitive damages for the damage and losses Plaintiffs have incurred as a result of Defendants' knowledge, conduct, acts and omissions as set forth herein. Plaintiffs will seek to maintain this action as a class action, and/or the class certification of particular issues herein, under Rule 23 of the Federal Rules of Civil Procedure,

including, as appropriate, Rule 23(a)(1)-(4); (b)(1)(B); (b)(2); (b)(3); (c)(4); and (c)(5). Prior to any class certification motion, in sufficient time to place Defendants on fair notice and to enable appropriate discovery and briefing, with such scheduling subject to Court approval, Plaintiffs will identify those persons who will serve as proposed representatives for the class and/or subclasses sought to be certified and, if necessary, add or join them as parties hereto.

177. It is contemplated that Local Government Entities will likely join as plaintiffs in this action after the filing of this Master Complaint, Cross-Claim, and Third-Party Complaint, and those plaintiffs will adopt these allegations and join this action by completing a Local Government Short Form dedicated to that purpose and approved by the Court. The Local Government Short Form has been filed with this Court in Civil Action No. 10-9999.

### **PARTIES, JURISDICTION, AND VENUE**

#### **Parties**

178. Plaintiffs, Cross-Claimants in Limitation, and Third-Party Plaintiffs in Limitation (hereinafter “Plaintiffs”) are local government entities or officials, including cities, towns, counties, villages, parishes, municipalities, special districts, school boards, sheriffs, district attorneys, public boards, institutions, departments, commissions, districts, corporations, agencies, authorities, and any agencies or subdivisions of any of these, and other local public or governmental bodies of any kind which are not state agencies, in Florida, Alabama, Mississippi, Louisiana and Texas, who have suffered damage, destruction, or diminution in value of property, loss of tax revenue, income and/or use, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, and/or costs as a result of the oil spill by the oil rig Deepwater Horizon in the Gulf of Mexico on April 20, 2010.

179. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation BP Exploration & Production, Inc. (“BP Exploration”) is a Delaware corporation with

its principal place of business in Warrenville, Illinois. BP Exploration was a lease holder and the designated operator in the lease granted by the former Minerals Management Service<sup>1</sup> (“MMS”) allowing it to perform oil exploration, drilling, and production-related operations in Mississippi Canyon Block 252, the location known as “Macondo” where the Spill originated. BP Exploration was designated as a “Responsible Party” by the U.S. Coast Guard under the Oil Pollution of 1990, 33 U.S.C. § 2714. This court has personal jurisdiction over BP Exploration, because BP Exploration is registered to do business in Louisiana, does business in Louisiana, and has a registered agent in Louisiana.

180. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation BP America Production Company (“BP America”) is a Delaware corporation with its principal place of business in Houston, Texas. BP America was the party to the Drilling Contract with Transocean Ltd. for the drilling of the Macondo well by the Deepwater Horizon vessel. This Court has personal jurisdiction over BP America, because BP America is registered to do business in Louisiana, does business in Louisiana, and has a registered agent in Louisiana.

181. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation BP p.l.c. is a British public limited company with its corporate headquarters in London, England. BP p.l.c. is the global parent company of the worldwide business operating under the “BP” logo. BP p.l.c. is one of the world’s largest energy companies with over 80,000 employees and \$239 billion in revenues in 2009. BP p.l.c. operates its various business divisions, such as the “Exploration and Production” division in which BP Exploration and BP

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<sup>1</sup> The MMS, a federal entity that divides the Gulf of Mexico’s seafloor into rectangular “blocks,” and then auctions the rights to drill for oil and gas beneath those blocks of seafloor, was reorganized as the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) on June 18, 2010; however, it shall be referred to as the MMS throughout this document.



America fall, through vertical business arrangements aligned by product or service groups. BP p.l.c.'s operations are worldwide, including in the United States. Defendants BP Exploration and BP America are wholly-owned subsidiaries of BP p.l.c. and are sufficiently controlled by BP p.l.c. so as to be BP p.l.c.'s agents in Louisiana and the U.S. more generally.

182. BP p.l.c. states that it is the leading producer of oil and natural gas in the United States and the largest investor in U.S. energy development. A sampling of BP p.l.c.'s contacts with the U.S. are as follows: (a) BP p.l.c.'s American Depository Shares are listed on the New York Stock Exchange and BP p.l.c. is the largest non-U.S. company listed on the NYSE; (b) roughly 40% of BP's shares are owned by U.S. individuals and institutions; (c) BP p.l.c. files annual reports with the U.S. Securities and Exchange Commission; (d) approximately 60% of BP p.l.c.'s fixed assets are located in the U.S. or the European Union; and (e) BP p.l.c. reports having 2,100 U.S.-based employees in non-Exploration & Production, non-Refining & Marketing BP entities.

183. This Court has general jurisdiction over BP p.l.c. pursuant to Louisiana's long-arm general jurisdiction provision (13 Louisiana Statute § 3201(B)), in combination with Rule 4(k)(1)(A) of the Federal Rules of Civil Procedure. BP p.l.c. does business in Louisiana, has had continuous and systematic contacts with Louisiana (and the U.S. more generally), and has been served with a summons in individual complaints that are the subject of this Master Complaint and will be served with a summons on this Master Complaint.

184. Alternatively, if BP p.l.c. contests that it is subject to jurisdiction under Louisiana's long-arm jurisdiction statute, then this Court may exercise personal jurisdiction over BP p.l.c. pursuant to Rule 4(k)(2) of the Federal Rules of Civil Procedure, the federal long-arm jurisdiction provision, because claims in this action arise under federal law, the exercise of

jurisdiction over BP p.l.c. is consistent with the United States Constitution and laws,” and BP p.l.c. has been served with a summons in individual complaints that are the subject of this Master Complaint and will be served with a summons on this Master Complaint.

185. This Court also has specific jurisdiction over BP p.l.c. pursuant to Louisiana’s long-arm specific jurisdiction provision (13 Louisiana Statute § 3201(B)), in combination with Rule 4(k)(1)(A) of the Federal Rules of Civil Procedure. Plaintiffs’ causes of action arise out of wrongful conduct committed by BP p.l.c., directly or indirectly by its agents, that caused injury or damage in Louisiana by an offense or quasi offense committed through an act or omission outside of Louisiana, and BP, p.l.c. regularly does or solicits business, or engages in any other persistent course of conduct, or derives revenue from goods used or consumed or services rendered in Louisiana. These acts or omissions took place both before the blowout resulting in the oil spill and in the negligent conduct of BP, p.l.c. after the blowout in attempting to contain the catastrophic damage caused by the oil spill. In addition, BP p.l.c. has been served with a summons in individual complaints that are the subject of this Master Complaint and will be served with a summons on this Master Complaint.

186. In addition, this Court also has personal jurisdiction over BP p.l.c. under agency principles, because BP p.l.c.’s agents, BP America and BP Exploration, do business in Louisiana. BP America and BP Exploration are both wholly-owned subsidiaries of BP p.l.c. In BP p.l.c.’s Annual Report for 2009, in which it presents a consolidated financial statement that includes BP America and BP Exploration, BP p.l.c. states that it “controls” both BP America and BP Exploration, among other subsidiaries, meaning that it has “the power to govern the financial and operating policies of the [subsidiary] so as to obtain benefit from its activities . . . .”

187. BP p.l.c.’s direct, joint and/or assumed responsibility and/or liability for safety

and well control, both before and/or after the explosions and blowout on April 20, 2010, is further evidenced by the announcement of the Macondo Project on the BP website hosted and copyrighted by BP p.l.c., the publication of information concerning the casualty and spill on the BP website hosted and copyrighted by BP, the express and/or implied acceptance of responsibility for the safety of BP operations in North America and the Gulf of Mexico in statements by officers of BP p.l.c., the presence (upon information and belief) of a BP p.l.c. officer or employee on the Deepwater Horizon for the celebration that occurred shortly before the explosions and fire, the direct participation of BP p.l.c. employees in the post-casualty investigation, the direct participation of BP p.l.c. officers and employees in the Governmental post-casualty investigations, the direct participation of BP p.l.c. officers and employees in the post-casualty well-control efforts, and the direct participation of BP p.l.c. in the establishment and/or funding of the Escrow Fund and/or Gulf Coast Claims Facility.

188. BP Exploration, BP America, and BP p.l.c. are generally referred to herein collectively as “BP.” As lease operator of the Macondo prospect site, BP was responsible for assessing the geology of the prospect site, engineering the well design, obtaining regulatory approvals for well operations, and retaining and overseeing the contractors working on the various aspects of the well and the drilling operations.

189. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Transocean Ltd. (“Transocean Ltd.”) is a Swiss corporation that maintains substantial U. S. offices in Houston, Texas, and that at all pertinent times was doing business in the State of Louisiana and within this district. According to its Complaint and Petition for Exoneration from or Limitation of Liability, Transocean Ltd. was an owner, managing owner, owner *pro hac vice*, and/or operator of the Deepwater Horizon.

190. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Transocean Offshore Deepwater Drilling, Inc. (“Transocean Offshore”) is a Delaware corporation with its principal place of business in Houston, Texas, and that at all pertinent times was doing business in the State of Louisiana and within this district. Transocean Offshore is affiliated with Transocean Ltd. and was an owner, managing owner, owner *pro hac vice*, and/or operator of the Deepwater Horizon.

191. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Transocean Deepwater, Inc. (“Transocean Deepwater”), is a Delaware corporation with its principal place of business in Houston, Texas, and that at all pertinent times was doing business in the State of Louisiana and within this district. Transocean Deepwater is affiliated with Transocean Ltd. and was an owner, managing owner, owner *pro hac vice*, and/or operator of the Deepwater Horizon.

192. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Transocean Holdings, LLC (“Transocean Holdings”) is a Delaware corporation with its principal place of business in Houston, Texas, and that at all pertinent times was doing business in the State of Louisiana and within this district. Transocean Holdings is affiliated with Transocean Ltd. and is a wholly-owned subsidiary of Transocean Offshore. Transocean Holdings is an owner, managing owner, owner *pro hac vice*, and/or operator of the Deepwater Horizon and participated in the Deepwater Horizon’s offshore oil drilling operations at the Macondo prospect, where the Spill originated. More specifically, Transocean Holdings is party to the contract with BP regarding the lease of the Deepwater Horizon for drilling operations in the Gulf of Mexico. On April 28, 2010, the U.S. Coast Guard named Transocean Holdings as a “Responsible Party” under the Oil Pollution Act for the surface oil spill resulting from the

blowout by the Deepwater Horizon.

193. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Triton Asset Leasing GmbH (“Triton”) is a Swiss limited liability company with its principal place of business in Zug, Switzerland. Triton is affiliated with Transocean Ltd. and is an owner, managing owner, owner *pro hac vice*, and/or operator of the Deepwater Horizon.

194. Defendants, Cross-Claim Defendants in Limitation, and/or Third-Party Defendants in Limitation Transocean Ltd., Transocean Deepwater, Transocean Offshore, Transocean Holdings, and Triton are hereinafter referred to collectively as “Transocean.” At the Macondo site, Transocean provided the Deepwater Horizon vessel and personnel to operate it. At all times relevant to the Spill, Transocean, subject to BP’s inspection and approval, was responsible for maintaining well control equipment, such as the blowout preventer and its control systems. Transocean also provided operational support for drilling-related activities on board the Deepwater Horizon, as well as onshore supervision and support for those drilling activities at all times relevant to the Spill.

195. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Halliburton Energy Services, Inc. is a Delaware corporation with its principal place of business in Houston, Texas. Halliburton is registered to do and does business in the State of Louisiana. Halliburton provided engineering services, materials, testing, mixing, and pumping for cementing operations on board the Deepwater Horizon, as well as onshore engineering support for those operations. Halliburton was responsible for the provision of technical advice about the design, modeling, placement, and testing of the cement that was used in the Macondo well. At and before the time of the blowout, Halliburton was engaged in cementing operations to isolate the hydrocarbon reservoirs and seal the bottom of the well against the influx of

hydrocarbons like gas and oil.

196. Halliburton division Sperry Drilling Services (formerly Sperry Sun Drilling Services) was responsible for mudlogging personnel and equipment on the Deepwater Horizon, including downhole drilling tools. Sperry mudlogging personnel were partially responsible for monitoring the well, including mud pit fluid levels, mud flow in and out of the well, mud gas levels, and pressure fluctuations. Throughout this Master Complaint, Cross-Claim, and Third-Party Complaint, “Halliburton” shall refer to both Halliburton Energy Services, Inc. and its Sperry division.

197. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation M-I, LLC (“M-I”) is a Delaware limited liability company with its principal place of business in Wilmington, Delaware, and that at all relevant times was registered to do, and was doing, business in Louisiana and within this district. M-I, also known as M-I SWACO, supplies drilling and completion fluids and additives to oil and gas companies in Louisiana and elsewhere, providing pressure control, vessel instrumentation, and drilling waste management products and services. On the Deepwater Horizon, M-I provided mud products, including drilling fluids and spacers, engineering services, and mud supervisory personnel, such as mud engineers and drilling fluid specialists, to manage the properties of those fluids in the well. M-I employees planned and/or supervised key fluid-related activities at Macondo, such as the mud displacement that was occurring at the time of the April 20, 2010, blowout.

198. BP, Transocean, Halliburton, and M-I are collectively referred to herein as the “Drilling Defendants,” as they were all involved in the drilling, cementing, and other temporary well abandonment activities of the Deepwater Horizon, and thus their actions caused and/or contributed to the Spill.

199. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Cameron International Corporation f/k/a Cooper-Cameron Corporation (“Cameron”) is a Delaware corporation with its principal place of business in Houston, Texas. Cameron is registered to do and does business in the State of Louisiana. Cameron manufactured, designed, supplied, and/or installed the Deepwater Horizon’s sub-sea emergency well-closure device known as a blowout-preventer (“BOP”) , which is, and was at all material times, an appurtenance of the vessel and a part of the vessel’s equipment. The Cameron-made BOP that was installed at the Macondo wellhead failed to operate as intended at the time of the blowout on April 20, 2010, was improperly designed, was inappropriate for the intended environment or use, and/or possessed product defects.

200. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Weatherford U.S. L.P. (“Weatherford”) is a Louisiana limited partnership that maintains its principal place of business in Houston, Texas, and that at all pertinent times was registered to do, and was doing business in Louisiana and within this district. Weatherford designed and manufactured, marketed, sold, and/or distributed the casing components such as the float collar, shoe, and centralizers appurtenant to the vessel, and provided the personnel and equipment for running the casing and casing components into the wellbore.

201. Drilling Defendants, Cameron, and Weatherford are jointly, severally, and solidarily liable under various principles of federal, maritime, and/or applicable State tort law, and under the Oil Pollution Act.

202. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Anadarko Petroleum Corporation Co. (“Anadarko”) is a Delaware corporation with its principal place of business in The Woodlands, Texas. Anadarko is registered to do and does

business in the State of Louisiana. Anadarko is an oil and gas exploration and production company.

203. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Anadarko E&P Company LP (“Anadarko E&P”) is a Delaware limited partnership with its principal place of business in The Woodlands, Texas. Anadarko E&P is registered to do and does business in the State of Louisiana. Anadarko E&P is an oil and gas exploration and production company.

204. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation MOEX Offshore 2007 LLC (“MOEX Offshore”) is a Delaware corporation with its principal place of business in Houston, Texas. MOEX Offshore does business in the State of Louisiana and/or in state and/or federal waters off the coast of Louisiana. MOEX Offshore is a wholly-owned subsidiary of MOEX USA Corporation, which in turn is a wholly-owned subsidiary of Mitsui Oil Exploration Co., Ltd. (“MOECO”). However, MOEX Offshore is not a distinct corporate entity performing autonomous business activities, but is instead an entity wholly dominated and controlled by its ultimate parent company, MOECO, as alleged below. At all relevant times, MOEX Offshore was a party to the Operating Agreement, and held a 10% ownership interest in the lease of the Macondo Prospect site in the Mississippi Canyon Block 252 in the Gulf of Mexico.

205. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation MOEX USA Corporation (“MOEX USA”) is incorporated in Delaware and has its principal place of business in Houston, Texas. However, MOEX USA is not a distinct corporate entity performing autonomous business activities, but is instead an entity created solely to serve as a holding company for other corporate entities, including MOEX Offshore, and is dominated



and controlled by its parent company, MOECO, as alleged below. MOEX USA is named as a defendant herein because it is part of the corporate construct by which MOECO owns, dominates, controls, and benefits from the activities of MOEX Offshore.

206. Defendant, Cross-Defendant in Limitation, and/or Third-Party Defendant in Limitation Mitsui Oil Exploration Co., Ltd. (“MOECO”) is incorporated in Japan and has its principal place of business in Tokyo, Japan. MOECO wholly owns MOEX USA, which in turn wholly owns MOEX Offshore. As alleged more fully below, MOECO is named as a defendant herein because at all relevant times it dominated and controlled the activities of MOEX Offshore and MOEX USA, such that it is the alter ego of its subsidiaries, MOEX Offshore and MOEX USA, thus requiring that the liability of MOEX Offshore and/or MOEX USA be imputed to MOECO. Alternatively, as also alleged below, MOEX Offshore and MOEX USA acted at all relevant times as agents of MOECO, and the liability of those entities should therefore be imputed to MOECO.

207. As alleged below, MOECO’s activities in the United States, including in this and all relevant jurisdictions, have been continuous and systematic. MOECO has purposely availed itself of the protections, benefits, and privileges of American law and should have reasonably anticipated being involved in this litigation in the United States. Moreover, because at all relevant times MOECO asserted domination and control over the business, operations and policy decisions of MOEX Offshore and MOEX USA, those U.S. companies were merely the alter egos and/or agents of MOECO. Thus, MOECO is subject to the exercise of both general and specific jurisdiction by this Court, an exercise of jurisdiction that will not offend traditional notions of fair play and substantial justice.

208. MOECO is a majority-owned subsidiary of Mitsui & Co., Ltd. (“Mitsui”). Mitsui

is a publicly traded company, whose American depository shares are traded on the NASDAQ Global Select Market. MOECO is listed in Mitsui's consolidated financial statements and filings with the U.S. Securities and Exchange Commission as a "major" subsidiary of Mitsui. MOECO is engaged in the business of "exploration, development, production and sales of crude oil, natural gas and other mineral resources and investment in companies engaged in these activities."

209. MOECO operates through its own activities and those of its subsidiaries and affiliates located throughout the world, including in the United States. Since MOECO opened its office in Houston, Texas, in February 2002, "we have been expanding our business in the USA," and "striving to acquire assets with high potential" in the United States. MOECO identifies the United States as a "Focus Area" that it seeks to continue to "develop into [a] Core Area[.]" MOECO has identified itself as having at least the following subsidiaries or affiliates in the United States: MOEX USA, MOEX Offshore, MitEnergy Upstream LLC ("MitEnergy"), Mitsui E&P USA LLC, MOEX Gulf of Mexico Corporation, and MOEX Oil & Gas Texas LLC. Each of these subsidiaries of MOECO shares the same Houston, Texas, address, and many of the same directors and managers as each other and MOECO.

210. MOECO's expansion of its United States business ventures has included numerous oil and gas exploration and investment activities in the Gulf of Mexico. For example, in May 2006, MOECO and Mitsui acquired a 50% interest in an oil and gas leasehold in the Gulf of Mexico. The Japanese companies established MitEnergy for the purpose of holding that interest. In November 2009, MOECO and Mitsui arranged for that company to sell their Gulf of Mexico oil and gas assets to a third party, the proceeds of which sale solely benefited MOECO.

211. In July 2007, MOECO entered into an agreement with BP E&P for a partial

interest in an ultra-deep gas exploration project at the Gouda Prospect site in the Gulf of Mexico, noting in a press release that its participation in this project “provides an excellent opportunity to further expand its business in the U.S.” As alleged more fully below, MOECO later orchestrated a transaction in which it used MOEX Offshore to obtain a 10% working interest in the Macondo Prospect site through an exchange with BP E&P, swapping MOECO’s interest in the Gouda Prospect for the 10% interest in the Macondo Prospect.

212. More recently, in February 2010, MOECO reported that it had entered into yet another new business in the United States when “we [MOECO and Mitsui] entered into a definitive agreement with a partner to participate in the development and production of the Marcellus Shale Gas Project in the State of Pennsylvania.”

213. Although MOEX Offshore was the entity identified as the owner of the 10% leasehold interest in the Macondo Prospect – a 10% interest in the hydrocarbons extracted from that location – it was MOECO that was responsible for creating MOEX Offshore and its immediate holding company, MOEX USA, and for orchestrating the acquisition of the ownership interest in the Macondo Prospect. As alleged above, in July 2007, MOECO announced it had entered into an “Acquisition and Participation Agreement with BP Exploration and Production, Inc. ... on the 29th of June, 2007 to participate in an ultra-deep gas exploration project in the Gulf of Mexico ... which is being actively pursued by BP.” That gas exploration project was the exploratory drilling exercise at the Gouda Prospect site in the Garden Banks Block 997 in the Gulf of Mexico. MOECO announced that it would own a 15% leasehold interest in the Gouda Prospect site (an interest apparently later reduced to 10%).

214. In September 2007, MOECO, through its agent/alter ego MOEX USA, established MOEX Offshore for the purpose of holding MOECO’s interests in various Gulf of

Mexico projects, including the Gouda Prospect, and later, the Macondo Prospect.

215. In November 2009, BP E&P and MOEX Offshore entered into a Lease Exchange Agreement (effective October 1, 2009), pursuant to which MOEX Offshore conveyed to BP E&P its interest in the Gouda Prospect site, and BP E&P, in exchange, conveyed to MOEX Offshore a 10% interest in the Macondo Prospect site. A condition of the Lease Exchange Agreement was that MOEX Offshore pay BP E&P “cash consideration of 1.92 million dollars,” to be “allocated” to the Macondo Prospect lease. The Lease Exchange Agreement also refers to a February 15, 2008, operating agreement between BP E&P, as operator, and the MOECO subsidiary, MitEnergy, as non-operator, concerning the Gouda Prospect lease. Upon information and belief, Plaintiffs allege that it was in fact MOECO that caused and directed MOEX Offshore to enter into the Lease Exchange Agreement for the purpose of obtaining a leasehold interest in the Macondo Prospect.

216. On or about October 1, 2009, BP E&P, as the Operating Party, and MOEX Offshore, as a Non-Operating Party, entered into the Operating Agreement. On or about December 17, 2009, BP E&P, MOEX Offshore, Anadarko, and Anadarko E&P executed a “Joinder” of the Operating Agreement. Subsequently, the parties to the Operating Agreement held the following working interest ownership percentages in the lease of the Macondo Prospect: BP E&P, 65%; MOEX Offshore, 10%; Anadarko E&P, 22.5%; and Anadarko, 2.5%.

217. At all times relevant herein, MOECO has dominated and controlled the business, operations, policies, and actions of MOEX Offshore and MOEX USA to the extent that there is no meaningful distinction between them and MOECO, and they are more accurately described as agents and/or alter egos of MOECO, rather than simply its subsidiaries. MOECO dominates and controls MOEX Offshore and MOEX USA through, inter alia: financial, operational, and policy

control; a lack of corporate formalities at MOEX Offshore and MOEX USA; and nearly identical directors, managers, and/or executive officers. For example, the same six individuals are directors, managers, and/or officers of both MOEX Offshore and MOEX USA; four of them are also MOECO directors and executive officers, and the Texas Secretary of State lists MOECO's Tokyo address for all of the overlapping directors/officers. MOEX USA and MOEX Offshore also share the same Houston, Texas, office and have a common president, Naoki Ishii. Upon information and belief, Mr. Ishii is the only management-level employee of MOEX Offshore and MOEX USA, and he reports directly to MOECO directors and/or executive officers.

218. Although Mr. Ishii has issued public statements with regard to the Deepwater Horizon disaster and the ensuing Spill, it has been MOECO, speaking on behalf of MOEX Offshore and itself, that has been the primary source of public statements concerning the Spill and its aftermath. MOECO's parent, Mitsui, has also made numerous public statements about the potential impact of the Spill on its financial condition. Upon information and belief, Plaintiffs allege that all public statements about the Spill and its aftermath by or on behalf of MOEX Offshore, as well as all operational and financial decision-making concerning the Spill and its aftermath (including the payment, or non-payment, of response and clean-up expense invoices from BP E&P), have been made and directed by MOECO (and in some instances, Mitsui).

219. Thus, neither MOEX Offshore nor MOEX USA are operated as corporations distinct from each other or from MOECO – rather, MOECO conducts its U.S. activities through these agent/alter ego entities, and all activities of MOEX Offshore and MOEX USA should be imputed to MOECO, subjecting MOECO to the exercise of general and/or specific personal jurisdiction in the United States and by this Court.

220. To the extent necessary, Plaintiffs specifically reserve the right to amend this Voluntary Master Complaint to name additional parties defendant, pursuant to future conduct, further information learned through discovery or investigation, or any other reason.

### **Jurisdiction**

221. Jurisdiction exists before this Court pursuant to Article III, Section 2 of the United States Constitution, which empowers the federal judiciary to hear “all Cases of admiralty and maritime jurisdiction.”

222. The claims presented herein are admiralty or maritime claims within the meaning of Rule 9(h) of the Federal Rules of Civil Procedure, and Plaintiffs hereby designate this case as an admiralty or maritime case as provided in Rule 9(h).

223. In addition, this Court has jurisdiction over this action pursuant to the Oil Pollution Act, 33 U.S.C. § 2717 (b) (the “OPA”).

224. This Court has supplemental jurisdiction over Plaintiffs’ state law claims pursuant to 28 U.S.C. § 1367.

225. Jurisdiction also exists over this action pursuant to The Admiralty Extension Act, 46 U.S.C. § 30101, which extends the admiralty and maritime jurisdiction of the United States to cases of injury or damage, to person or property, caused by a vessel on navigable waters, even though the injury or damage is done or consummated on land.

### **Venue**

226. Prosecution of this action in this district is proper under 28 U.S.C. § 1391 because the events or omissions giving rise to the claims asserted herein occurred in this district. Venue is otherwise appropriate in this district consistent with 28 U.S.C. § 1407 and the 2010 Transfer Order of the Judicial Panel on Multidistrict Litigation (“JPML”). *See In re Oil Spill by the Oil*

*Rig “Deepwater Horizon” in the Gulf of Mexico, on April 20, 2010*, MDL No. 2179, 2010 WL 3166434, 2010 AMC 1977 (JPML, August 10, 2010). Actions may also be filed in this Judicial District pursuant to the Direct Filing Order [PTO No. 20].

### **FACTUAL ALLEGATIONS**

#### **A. The Process of Deepwater Offshore Drilling**

227. On April 20, 2010, Drilling Defendants’ workers on the Deepwater Horizon drilling vessel lost control of the subsea oil well they had almost completed. When highly pressurized hydrocarbons leaked into the well, the vessel’s emergency equipment failed to stop the oil and gas from blowing out of the well, which led to explosions and a fire on the Deepwater Horizon, and ultimately the sinking of the vessel and the resulting Spill.

228. As described more fully below, the loss of well control was due to the failure of mechanical and cement barriers to seal off the well against the influx of highly pressurized hydrocarbons from the reservoirs surrounding the bottom of the well. The many indications that hydrocarbons were leaking into the well were misinterpreted and/or overlooked by Deepwater Horizon workers for 51 minutes prior to the blowout. Once the hydrocarbons reached the vessel decks, fire and gas prevention and alarm systems on the vessel failed to warn the crew and prevent ignition of a fire. The vessel’s subsea BOP also failed to seal the well and stop the flow of hydrocarbons fueling the fire, which exacerbated the disaster.

229. After the Deepwater Horizon sank, oil and gas gushed out of the damaged well and into the Gulf of Mexico for 12 weeks, fouling the environment, damaging and contaminating real and personal property, and doing immense and long-lasting damage to the environment and economy of Plaintiffs and the Gulf of Mexico. Meanwhile, BP downplayed the severity of the Spill and was unprepared for the massive clean up effort required.

230. All of these failures – to plan, monitor, control, contain, mitigate, and clean up –

sprang from decades-long histories of organizational malfunction and myopia on the part of the Drilling Defendants. As the co-chairman of the National Commission investigating the Spill said: “There is virtual consensus among all the sophisticated observers of this debacle that ... leading players in the industry made a series of missteps, miscalculations and miscommunications that were breathtakingly inept and largely preventable.”

**B. The Macondo Lease, and BP’s Exploration Plan and Drilling Permit**

231. Deepwater offshore drilling for hydrocarbons such as oil and natural gas is an immensely complex, technical process, and a relatively new one that has only developed over the last five years. The first challenge is finding the hydrocarbons. Seismic and/or magnetic surveys are taken of the geological formations deep in the Earth’s crust below the sea floor, in the hopes of finding “traps:” rock formations that have trapped a reservoir of hydrocarbons beneath an impermeable layer, preventing them from migrating to the surface and escaping.

232. Upon locating a promising trap of hydrocarbons, drilling vessels such as the Deepwater Horizon are positioned on the sea surface above the proposed well site, and from there begin drilling an “exploratory” well to investigate the viability of the trap. Once the trap is determined to be a worthwhile source of hydrocarbons, the drilling vessel performs “completion” operations to transform the exploratory well into a “production” well that will extract oil or gas from the trap. At this point, wells are sometimes temporarily abandoned — sealed with cement so they are secure against any influx of hydrocarbons from the reservoirs they have penetrated — so they can be reopened by a production vessel at some later date, when the well owner is ready to begin extracting hydrocarbons for production. At the time of the April 20, 2010, blowout, the Deepwater Horizon crew was in the process of preparing the Macondo well for temporary abandonment.

233. An exploratory well begins with a wide-diameter “pilot” hole drilled into the



seabed, generally to a depth of about 300 to 400 feet. The pilot hole is then “cased,” or lined with pipe. “Casing” describes both the actual pipe lining a well, in addition to the act of lining the drilled hole — the well bore — with such pipe.

234. The first section of casing pipe lowered into the pilot hole generally anchors a safety device known as a blowout preventer (“BOP”), which is an appurtenance of the drilling vessel and a part of the vessel’s equipment. The BOP is an assembly of hydraulically-operated rams that can be used to partially or totally seal the well during routine drilling activities as well as in the event of a well control emergency. In the event of an influx of hydrocarbons into the well, closure of the BOP rams can prevent a “kick” — a small leak of hydrocarbons into the well — from escalating into a “blowout” — the uncontrolled release of hydrocarbons from a well into the surrounding environment. A BOP can be activated manually from the drilling vessel, or automatically via the automatic mode function (“AMF”), also known as a “deadman switch,” which closes the device’s most secure rams if both electrical and hydraulic connections to the drilling vessel are severed. BOP functions can also be activated by using remotely operated vehicles (“ROVs”) on the sea floor via the “hot stab” or autoshear functions, which are explained more fully below.

235. The risk of a blowout is one of the most dangerous and common risks in deepwater drilling, hence the installation of the BOP so early in the well drilling process. The reservoirs of hydrocarbons trapped in the rock formations miles beneath the sea floor are often highly pressurized, and managing the pressures in a well is a vital — and often volatile — task during drilling operations. Proper well monitoring will catch small hydrocarbon influxes early, so a kick can be contained and the source of the leak repaired before well control is jeopardized. All workers on a drilling vessel have the authority to call for work on a well to stop if they have

a safety concern, including any indication that hydrocarbons are leaking into the well. The BOP is then a crucial last line of defense for a drilling vessel and its workers if all other attempts to balance well pressure and counter an influx fail, and the well begins to flow out of control.

236. Once the BOP is properly positioned and secured over the pilot hole, the drilling apparatus and additional casing sections are lowered down through the BOP into the well, while a pipe called a “marine riser” connects the wellhead to the drilling vessel at the surface.

237. As the drilling apparatus moves downward drilling out the well bore hole, drilling fluid called “mud” is pumped down the center of the drill pipe. Drilling mud is a thick mixture of barite, water, clay, and chemicals that cools and lubricates the drill bit and suspends and carries rock fragments and other drilling debris to the surface as the mud circulates.

238. Drilling mud is carefully formulated so that its hydrostatic pressure<sup>2</sup> slightly exceeds that of the ambient pressure conditions in the various rock formations encountered during the drilling process. The weight of the mud pushes back against the pressure of the hydrocarbons in those formations, helping to control against the ever-present risk of kicks and blowouts in the well.

239. As the well bore is drilled deeper and deeper, additional sections of casing are added to line each newly-drilled open hole section with pipe. Each casing section is secured with a plug of cement. If a well is to be temporarily abandoned before production, then when drilling reaches the hydrocarbon reservoir, the cementing contractor temporarily seals the well off from the hydrocarbon reservoir it has penetrated, isolating the oil and gas to prevent it from leaking into the well, and then places a temporary cement plug below the BOP at the top of the

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<sup>2</sup> Hydrostatic pressure is the pressure exerted by a fluid due to the force of gravity. The denser a fluid, the higher its hydrostatic pressure. Drilling mud is often very dense (12-16 pounds per gallon), so it can counter the highly pressurized hydrocarbons surrounding a well. In comparison, seawater is relatively light, only 8.6 ppg.

well.

240. Assuming the design of the well is stable, and proper testing and analysis confirm the integrity of the cement plugs, casing string, and other well components, the drilling vessel can disconnect from the well, temporarily abandoning it until a permanent oil production platform is put into place on the sea surface above the well to begin extracting oil or gas.

**C. The Deepwater Horizon's Poor Safety and Maintenance Record**

241. On June 1, 2008, BP acquired a ten-year lease from the MMS to search for and exploit hydrocarbon reservoirs at the Macondo prospect site in Mississippi Canyon Block 252, 48 miles off the coast of Louisiana.

242. Before BP could begin operations at the Macondo site, federal regulations required BP to submit an Exploration Plan ("EP") demonstrating that it had planned and prepared to conduct its proposed activities in a manner that was safe, conformed to applicable regulations and sound conservation practices, and would not cause undue or serious harm or damage to human or marine health, or the coastal environment. 30 C.F.R. §§ 250.201, 250.202.

243. Federal regulations required that the EP be accompanied by "oil and hazardous substance spills information" and "environmental impact analysis information." 30 C.F.R. §§ 250.212, 250.219, 250.227.

244. Among the information required to accompany the EP was a "blowout scenario," described as follows:

A scenario for the potential blowout of the proposed well in your EP that you expect will have the highest volume of liquid hydrocarbons. Include the estimated flow rate, total volume, and maximum duration of the potential blowout. Also, discuss the potential for the well to bridge over, the likelihood for surface intervention to stop the blowout, the availability of a rig to drill a relief well, and rig package constraints. Estimate the time it would take to drill a relief well. 30 C.F.R. § 250.213 (g).

245. The oil and hazardous spills information accompanying the EP was required to

include an oil spill response plan providing the calculated volume of BP's

worst case discharge scenario (see 30 C.F.R. 254.26(a)), and a comparison of the appropriate worst case discharge scenario in [its] approved regional [Oil Spill Response Plan] with the worst case discharge scenario that could result from [its] proposed exploration activities; and a description of the worst case discharge scenario that could result from [its] proposed exploration activities (see 30 C.F.R. 254.26(b), (c), (d), and (e)). 30 C.F.R. § 250.219.

246. Federal regulations required BP to conduct all of its lease and unit activities according to its approved EP, or suffer civil penalties or the forfeiture or cancellation of its lease. 30 C.F.R. § 250.280.

247. In February 2009, BP filed its 52-page Initial EP for the Macondo prospect site with the MMS. In the Environmental Impact Analysis section, BP repeatedly asserted that it was "unlikely that an accidental surface or subsurface oil spill would occur from the proposed activities." In the unlikely event that a spill did occur, BP predicted a worst case discharge scenario of 162,000 gallons of oil per day, an amount it assured the MMS that it was prepared to respond to. BP also claimed the well's distance from the nearest shoreline would preclude any significant adverse impacts from a spill.

248. Based on these assurances, the MMS approved BP's Initial EP for the Macondo prospect on April 6, 2009, including the approval of a "categorical exclusion" from the full environmental analysis normally required under the National Environmental Policy Act. As detailed more fully below, the MMS' approval of BP's Initial EP and the categorical exclusion from environmental analysis were predicated on BP's flagrant misrepresentations about the risk of a surface or subsurface oil spill at Macondo, and its capability to respond to such a spill.

249. After its EP was approved, BP sought a permit from the MMS authorizing it to drill up to a total depth of 19,650 feet at the Macondo site.

**D. Macondo: A Troublesome Well**

250. Once the EP and drilling permits for Macondo were approved, BP then entered into an Operating Agreement with Anadarko, Anadarko E&P, and MOEX Offshore, as described in paragraph 232 above.

251. The Operating Agreement defined the roles and responsibilities of the three joint leaseholders, including a series of checks and balances regarding health, safety, and environment issues in which the non-operational leaseholders Anadarko, Anadarko E&P, and MOEX Offshore were to receive significant information from BP regarding those issues and had the right to demand further information, as well as to call for meetings on those subjects and conduct their own inspections of the Deepwater Horizon vessel.

252. As a condition to acquiring their leasehold interests in the Macondo prospect, BP required Anadarko, Anadarko E&P, and MOEX Offshore to execute BP's well plan and Authorizations for Expenditure (AFE) for Macondo. This put Anadarko, Anadarko E&P, and MOEX Offshore on notice of the following relevant provisions of that well plan: (a) location; (b) the anticipated time necessary to conclude the operation; (c) total depth and target zones; (d) the proposed drilling and completion plans, including the casing program and directional details; (e) details of all coring, logging, and other evaluation operations conducted; (f) information about the drilling rig to be used. The AFEs informed Anadarko, Anadarko E&P, and MOEX Offshore about the financial aspects of the well plan.

253. The Operating Agreement also granted Anadarko, Anadarko E&P, and MOEX Offshore the rights to suggest their own proposed well plans for drilling exploratory and appraisal wells within the Macondo prospect, to place their own personnel on key drilling and well development teams, to receive substantial information and data about operations (including Insite real-time well data) on an ongoing basis, to call meetings with BP and other parties

regarding any aspect of the Macondo prospect, and the right of unanimous approval of all press releases regarding the prospect.

254. Moreover, a November 2009 amendment to the Operating Agreement gave Anadarko, Anadarko E&P, and MOEX Offshore the right to conduct “health, safety, and environmental inspection[s]” with a “right of access to activities and operations” on the rig, as well as to access BP’s files, audits, and statistics on health, safety, and environmental issues.

**E. Reckless Decision-Making in the Rush to Complete the Well**

255. The Deepwater Horizon was a \$560,000,000 dynamically-positioned, semi-submersible deepwater drilling vessel built for Transocean and put into service in February 2001.

256. At all times relevant herein, the Deepwater Horizon was owned by Transocean and leased to BP for drilling exploratory wells at the Macondo prospect site, pursuant to the December 9, 1998, Drilling Contract between Vastar Resources, Inc. and R&B Falcon Drilling Co. for RBS-8D Deepwater Horizon (“Drilling Contract”), and later amendments to that agreement.<sup>3</sup>

257. Prior to the Spill, Drilling Defendants had actual and/or constructive knowledge that their safety performance during offshore drilling operations was poor. Transocean CEO Steven L. Newman admitted prior to the Spill that “we have to improve our safety performance.” Just a month before the Spill, in response to “a series of serious accidents and near-hits within the global organization,” Transocean commissioned a broad review of the safety culture of its North American operations, including the Deepwater Horizon.

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<sup>3</sup> The parties to the 1998 Drilling Contract, Vastar Resources, Inc. and R&B Falcon Drilling Co., are now BP and Transocean entities, respectively. The Deepwater Horizon, formerly known as RBS-8D, was in the process of being built for R&B Falcon Corp. between 1998 and 2001, during which time Transocean purchased R&B Falcon Corp. Upon completion, the Deepwater Horizon was delivered to Transocean. BP America is a successor-in-interest to Vastar Resources, Inc. Amendments to the Drilling Contract were subsequently signed by representatives of Transocean and BP.

258. Also prior to the Spill, Drilling Defendants had actual and/or constructive knowledge of significant problems related to the Deepwater Horizon's equipment and maintenance, including problems with the vessel's BOP, electronic alarm systems, ballast systems used to stabilize the vessel in the water, and other significant deficiencies that could "lead to loss of life, serious injury or environmental damage as a result of inadequate use and/or failure of equipment." These equipment and maintenance problems are discussed more fully below.

259. Even if Drilling Defendants' equipment and operations inspection reports were ostensibly in compliance with MMS regulations, reports have surfaced that oil companies often authored their own inspection reports, submitting them for rubber-stamping by the MMS. Thus any seeming compliance with MMS inspection report regulations lacks credibility and does not protect Drilling Defendants' actions.

**F. Premature and Nonstandard Mud Displacement Begins**

260. The Macondo prospect site is in the Northern Gulf of Mexico, an area notorious in the industry for high temperature, high pressure, highly gaseous hydrocarbon reservoirs trapped in weak, brittle rock formations. At the Macondo site, the Deepwater Horizon was conducting drilling operations in excess of 18,000 feet. Drilling Defendants knew or should have known that the threat of blowouts increases as drilling depths increase, especially in an area with such troublesome geology as the Northern Gulf of Mexico.

261. Drilling Defendants had been struggling with the Macondo well even before the catastrophic events of April 20, 2010. In emails weeks before the blowout, BP employees referred to it as a "crazy," "nightmare" well. At depths almost 3.5 miles below the sea floor, the pressures within and strengths of the various formation layers the Deepwater Horizon was drilling through varied widely and changed often, requiring constant adjustments to drilling fluid

density and other factors. In some places the subsea rock formations were so brittle that they fractured, letting gallons of expensive drilling mud escape into the cracked and porous rock around the drill.

262. Deepwater Horizon workers reported that since drilling began on October 7, 2009, they had struggled to control the problematic well, as kicks of natural gas regularly burst into the well, halting the drilling progress. According to a NOAA Flow Rate Technical Group report, the hydrocarbon reservoirs the Macondo well drilled through have high ratios of gas to oil. The MMS had even warned BP that the gas buildup in this well was a concern and that BP should “exercise caution.”

263. As the drilling schedule fell farther behind due to these and other problems, Drilling Defendants, and BP in particular, increased the pressure on the Deepwater Horizon’s crew to “bump up” the speed of the drilling effort at Macondo.

264. On March 8, 2010, Drilling Defendants experienced serious problems with the well, including a hydrocarbon influx into the well and loss of well control. The hydrocarbons leaking into the well went unnoticed for about 33 minutes, allowing 40 barrels of hydrocarbons to flow into the well before it was shut in to restore well control — a “near miss” of what could have been a lethal blowout.

265. The March 8, 2010, influx was caused by damage to the formation the Deepwater Horizon was drilling through — the brittle rock fractured, swallowing up drilling tools and fluids, in addition to allowing hydrocarbons into the well. A BP analysis of the March 8, 2010 near miss deemed the drilling vessel team’s 33-minute response time to the hydrocarbon influx was too slow. A “lessons learned” document was distributed to BP employees, and both BP and Transocean leaders on the Deepwater Horizon were given verbal feedback about the handling of



the event. Several key individuals who were present during the March 8, 2010 incident were also working on the Deepwater Horizon six weeks later at the time of the April 20, 2010, blowout.

266. The formation damage from the March 8, 2010, incident was so severe that a length of drilling pipe became stuck in the open hole of the well bore, and Drilling Defendants were forced to abandon the lower part of the well bore, plug it with cement, and begin drilling anew in a different direction, setting then back several days and \$25 million. According to Mike Williams, a Transocean electronics technician on the Deepwater Horizon, it also caused BP and the other Drilling Defendants to further increase their demands that the drilling vessel's crew complete drilling operations at the well at a dangerously increased pace.

267. Pursuant to their Drilling Contract, BP was paying Transocean approximately \$500,000 per day to lease the Deepwater Horizon, not including contractors' fees. BP had planned for the drilling work at Macondo to take 51 days, at a cost of approximately \$96,000,000.

268. At the time of the blowout, drilling at Macondo was already months behind schedule, costing BP over \$1 million per day in vessel lease and contractor fees and putting them increasingly over budget. This excess cost put the Macondo project in conflict with BP's recent mandate of a 7% reduction in costs for all of its drilling operations in the Gulf of Mexico. In spite of the difficult and dangerous nature of the Macondo well, Drilling Defendants made multiple decisions about the drilling plan for economic reasons, even though those decisions increased the risk of the catastrophic failure of the "nightmare" well.

269. After investigating the disaster, Robert Bea, an oil industry expert leading the Deepwater Horizon Study Group, wrote: "Pressures to complete the well as soon as possible and

minimize costs as much as possible are evident in the cascade of decisions and choices that led to the blowout.”

270. Drilling Defendants repeatedly chose to violate industry guidelines and government regulations, and ignore warnings from their own employees and contractors on the Deepwater Horizon to reduce costs and save time on the behind-schedule and over-budget Macondo well. Testimony of employees on the drilling vessel highlights the time pressure BP and the other Drilling Defendants were putting on workers as they rushed them to double up on tasks and finish quickly so the well could be sealed and the Deepwater Horizon moved to another well prospect site to begin searching for even more oil.

271. This emphasis on speed and thrift over safety led to errors and omissions by Drilling Defendants which, in turn, caused and/or contributed to the blowout and the subsequent Spill.

**G. The Well Fails Key Pressure Tests, Yet Drilling Defendants Press On**

272. By April 9, 2010, Drilling Defendants had finished drilling the last part of the well bore, after which only casing and cementing the final open-hole section remained. In their rush to complete the well, Drilling Defendants made reckless decisions about well design, cementing, and well integrity testing that prioritized speed and cost-savings over safety and industry best practices.

273. Since the Spill, a series of governmental investigations and hearings has gradually produced evidence and testimony about the bad decisions, tradeoffs, actions, and inactions that led to this disaster, revealing a “ghastly” story of Drilling Defendants making “one bad call after another,” according to the chairmen of the presidential commission investigating the Spill at a November 10, 2010 hearing.

274. In short, as Robert Bea put it, “critical things were compromised for the wrong

reasons in the wrong ways at the wrong times.”

275. “Each company is responsible for one or more egregiously bad decisions” in “a suite of bad decisions,” many still inexplicable, involving tests that were poorly run, alarming results that were ignored, proper warning systems that were disabled and safety barriers that were removed prematurely at the high-pressure well, the presidential commission chairmen said. Taken together, these actions constituted “a cascade of deeply flawed failure and signal analysis, decision-making, communication, and organizational-managerial processes” that led to the blowout, in the words of the independent experts in the Deepwater Horizon Study Group.

276. Even BP has admitted that no one company’s single action or inaction caused this disaster, but rather “a complex and interlinked series of mechanical failures, human judgments, engineering design, operational implementation and team interfaces” by “multiple companies, work teams and circumstances” came together to cause the blowout and the Spill. Deepwater Horizon Accident Investigation Report, BP (September 8, 2010).

## **2. Cutting Corners on Well Design**

277. For the behind-schedule and over-budget Macondo well, Drilling Defendants chose a vulnerable well design with relatively few barriers against the ever-present risk of hydrocarbon blowouts because the safer option — which had been part of their original well design and was recommended by their contractors — would have taken longer to complete and would have cost up to an additional \$10 million.

278. In keeping with Macondo’s intractable nature, the last section of the well had been difficult to drill because of the narrow margin between the minimum pressure needed to keep the hydrocarbons in the surrounding reservoirs from leaking into the well, and the maximum pressure the rock formations themselves could take before fracturing and causing damage, delay, or loss of well control. The limited range of safe operating pressures in this last

open-hole section of the well required careful choices to maintain well integrity and safety during the drilling and cementing processes.

279. In order to strengthen the well design and provide multiple barriers against blowouts, drilling companies often use a redundant casing design called a “liner/tieback,” which provides four barriers against blowouts, while the “long string” casing design chosen by BP only provided two: the cement sealing off the hydrocarbons in the reservoirs from entering the well and, more than 18,000 feet above that, the seal assembly at the top of the well.

280. Although the liner/tieback design is more expensive and takes more time to install, it provides four barriers against hydrocarbons leaking into the well and causing blowouts: (1) the cement at the bottom of the well; (2) the hanger that attaches the liner pipe to the existing casing in the well; (3) the cement that secures the tieback pipe on top of the liner; and (4) the seal assembly at the wellhead.

281. Drilling Defendants were aware that the long string design was the riskier option. An undated BP “Forward Review Plan” recommended against the long string option because of the risks: “Long string of casing *was* the primary option” but a “Liner[/Tieback] ... is now the recommended option.”

282. The BP Forward Review Plan identified several arguments against using the long string casing design, including the high risk of a failed cement job, the inability to comply with MMS regulations, and the need to verify the cement job with a cement bond log test and most likely perform remedial cement job(s).

283. The BP Forward Review Plan also noted a number of advantages to using the liner/tieback design, including the liner hanger acting as an additional barrier against influxes, a higher chance for a successful cement job on the first try, and the flexibility to postpone a

remedial cement job, if it was found that one was required.

284. The long string casing design was especially inappropriate for a difficult and kick-prone well like Macondo. Documents show that BP had originally planned to use the safer liner/tieback design, but rewrote the drilling plan just weeks before the disaster — against the advice of its contractors and its own employees — because the project was behind schedule and over budget. Internal BP emails from late March 2010 acknowledged the risks of the long string design but chose it as the primary option because it “saves a lot of time...at least 3 days,” “saves a good deal of time/money,” and is the “[b]est economic case.”

285. Despite the known and documented operational risks and advantages to the respective well design options, one or more of the Drilling Defendants chose (or acquiesced to the choice) to install the long string casing instead of the safer liner/tieback design. There is no evidence that there was any motivation behind that decision other than the desire to save time and cut costs on the behind-schedule and over-budget well.

286. Drilling Defendants also made a risky choice for the casing pipe material itself, using metal well casings that raised concerns from their own engineers. Federal investigators cited internal documents showing that as early as 11 months prior to the blowout, BP engineers worried that the metal casings BP wanted to use might collapse under the high pressure at the bottom of the well. Senior drilling engineer Mark E. Hafle warned other BP employees that “I have seen it happen so know it can occur.” Using the metal casings also violated BP’s own safety policies and design standards. Nevertheless, the riskier metal casings were used after special permission was granted by BP supervisors. The internal reports do not explain why BP allowed for such a risky departure from its own safety standards, nor why the other Drilling Defendants allowed BP to use unsafe casings inappropriate for use in the highly pressurized

environment in the Macondo well bore.

287. In addition to the casing-related problems, the Weatherford-manufactured float collar installed on the final section of casing may have failed to seal properly, which could have allowed hydrocarbons to leak into the casing, contributing to the April 20, 2010 blowout.

288. A float collar is a component installed near the bottom of the casing string on which cement plugs land during the cementing job. A check-valve assembly fixed within the float collar works like a one-way valve, allowing drilling fluids or cement to be pumped in one direction through the valve, but preventing backflow of the fluids or cement when pumping is stopped, and preventing any influx of hydrocarbons below the float collar from rising farther up the casing. Failure of the Macondo well's float collar would have allowed hydrocarbons to flow up through the casing, towards the riser and the Deepwater Horizon at the surface, contributing to the blowout and the subsequent explosions, fire, sinking, and Spill.

289. To properly prevent against backflow of fluids or hydrocarbons into the casing, a float collar must be "converted," or closed after installation. Prior to conversion, an "auto-fill tube" holds the float collar's one-way check valves open so that mud can flow through without having to be pumped through with high force that could damage the formation—especially important when working in brittle formations like those at the bottom of the Macondo well. A float collar is converted by partially blocking the bottom of the autofill tube, which essentially pops the autofill tube out of the check valves, allowing them to close.

290. Drilling Defendants installed the Macondo well's float collar after the final casing was installed in the well. When they attempted to convert the float collar, however, there seemed to be some blockage preventing the mud circulation that would have completed the conversion. The drilling vessel crew made nine attempts to re-establish circulation by increasing

pressure in the casing, eventually succeeding with a pressure of 3142 psi — six times higher than the normal pressure needed to convert a float collar. In their report, BP’s disaster investigation team questioned whether this burst of high pressure actually converted the float collar, or just cleared the blockage that had been preventing circulation in the first place.

291. Later, vessel workers had to use another burst of abnormally high pressure to rupture a “burst disk” in one of the well’s Weatherford-manufactured wiper plugs. The burst disk did not rupture until 2900 psi was applied — three times the amount of pressure usually required. The various post-Spill investigations have been unable to explain the need for such atypically high pressures to convert the float collar (if it even converted at all) and to rupture the burst disk. At the time they occurred, these anomalies should certainly have raised concern in the minds of Drilling Defendants’ and Weatherford’s personnel.

### **3. Using Too Few Centralizers**

292. Drilling Defendants also cut corners — again despite multiple warnings from their employees and contractors — with the number of centralizers used on the last piece of casing pipe. Centralizers ensure that the casing pipe is centered in the well bore; if the pipe is not centered, the cement placed around it often fails to create a secure seal against the highly-pressurized hydrocarbons surrounding the well. The cement around the casing is intended to seal the space (the “annulus”) between the rock walls of the drilled out well bore hole and the casing that runs through the well bore. If the casing is not centered within the wellbore, the pipe can lay near or against the sides of the bore hole, creating too narrow of a space for the cement to set properly and leaving “channels” of empty space or weak areas in the cement. Those channels and imperfections can allow hydrocarbons to escape out of the formations and into the well, causing a kick or a blowout. An email from shore-based BP Operations Vice President Brett Coteles to rig-based BP drilling engineer Brian Morel acknowledged the importance of

centralizers, noting that “[e]ven if the hole is perfectly straight, a straight piece of pipe even in tension will not seek the perfect center of the hole unless it has something to centralize it.”

293. The American Petroleum Institute (“API”) Recommended Practice 65 explains: “If casing is not centralized, it may lay [sic] near or against the borehole wall....It is difficult if not impossible to displace mud effectively from the narrow side of the annulus if casing is poorly centralized. This results in bypassed mud channels and inability to achieve zonal isolation.”

294. On or about April 5, 2010, BP notified one or more of the other Drilling Defendants that it was planning to use only six centralizers on the final casing section at the Macondo well. Halliburton engineer Jesse Gagliano spent a day running models to determine if six centralizers would be enough to prevent channeling that gaseous hydrocarbons could seep through. Halliburton’s analysis concluded that 21 centralizers was the recommended number to ensure a secure cement job; using ten would result in a “moderate” gas flow problem and using only six would result in a “severe” gas flow problem. This information was provided to BP. Additional centralizers were available on the Deepwater Horizon, but BP well site leaders erroneously believed they were the wrong type, and did not want to wait for more. In the same email that had recognized the risks of proceeding with insufficient centralizers, BP official Brett Coteles shrugged off using only six, flippantly concluding, “who cares, it’s done, end of story, will probably be fine.”

295. Halliburton, hired for its cementing expertise, was fully aware that the number of centralizers BP chose to use was unsafe. Halliburton employee Marvin Volek had warned the BP well site team that BP’s cementing plan “was against our best practices.” Yet even after running the models that made it clear proceeding with only six centralizers would lead to “failure of the cement job,” Halliburton did not stop work or insist that BP use additional centralizers,



instead recklessly proceeding with the cement job it knew was destined to fail.

#### **4. Skipping Critical “Bottoms Up” Mud Circulation**

296. Another questionable decision made by one or more of the Drilling Defendants was the failure to fully circulate the drilling mud through the entire length of the well before beginning the cementing job. This procedure, known as “bottoms up,” cleans the well bore and prepares the annular space for cementing by completely circulating the drilling fluids from the bottom of the well all the way to the surface. A bottoms up circulation also ensures the removal of well cuttings and other debris from the bottom of the well, preventing contamination of the cement, permits a controlled release of gas pockets that may have entered the mud during the drilling process, and allows workers on the drilling vessel to test the mud for influxes of gas. Given that gaseous hydrocarbons leaking into the well was what ultimately caused the blowout, a bottoms up circulation could have revealed the severity of the situation at Macondo before it was too late.

297. The API guidelines recommend a full bottoms up circulation between installing the casing and beginning a cementing job. The recommended practice states that “when the casing is on bottom and before cementing, circulating the drilling fluid will break its gel strength, decrease its viscosity and increase its mobility. The drilling fluid should be conditioned until equilibrium is achieved. At a minimum, the hole should be conditioned for cementing by circulating 1.5 annular volumes or one casing volume, whichever is greater.”

298. Halliburton technical advisor Jesse Gagliano told BP that Halliburton’s “recommendation and best practice was to at least circulate one bottoms up on the well before doing a cement job.” Yet again, Halliburton knew of the risk but did not insist that BP follow safe and recommended practices.

299. Even BP’s own April 15, 2010 operations plan for the Deepwater Horizon called

for a full “bottoms up” procedure to “circulate at least one (1) casing and drill pipe capacity, if hole conditions allow.”

300. But a full bottoms up circulation would have taken up to 12 hours on the deep Macondo well, so against the recommendations of the API and Halliburton, and against industry standards and its own operations plan, BP chose to save time and money at the expense of safety by circulating only a small fraction of the drilling mud before beginning cementing. This too put the cement job further at risk.

301. Notwithstanding all of Drilling Defendants’ risky choices and skipped safety precautions up to this point, and despite knowing the risks of using insufficient centralizers and skipping the bottoms up circulation, Halliburton began the cementing job on the Macondo well.

#### **5. Cementing: the Incorrect Cement Mixture and a Failed Seal**

302. Creating solid cement seals on a well is delicate, precise work, and among the most critical tasks to ensure the integrity and safety of the well. Nevertheless, after cutting corners on well design and the number of centralizers, and incomprehensibly skipping the bottoms up circulation, Drilling Defendants made even more cost-cutting, careless decisions about the crucial cementing work in the Macondo well.

303. Drilling Defendants knew or should have known that poor cementing increases the risk of a blowout. In a 2007 study, the MMS expressed concerns about drilling vessel blowouts caused by ineffective and/or improper cementing work. Although the study noted that the overall risk of blowouts has been declining, it suggested that blowouts related to cementing work continue with some regularity, and most frequently in the Gulf of Mexico. The study found that cementing problems were associated with 18 of 39 blowouts that occurred between 1992 and 2006, and in 18 of the 70 blowouts that occurred from 1971 to 1991. Nearly all of the blowouts examined occurred in the Gulf of Mexico.

304. Drilling Defendants also knew or should have known that careless, ineffective, negligent, or reckless cementing work by Halliburton caused an August 2009 blowout at the Montara well in the Timor Sea off the coast of Australia. During that incident, a sequence of events almost identical to those at Macondo led to a similarly disastrous blowout, and a spill that gushed oil for ten weeks, causing environmental damage across a 200-mile radius.

305. Prior to beginning cementing operations on the last section of the Macondo well, Halliburton had to make decisions about the type, volume, placement, and pumping of the cement, while taking into account the narrow range of safe operating pressures at the bottom of the well, in addition to the gaseous nature of the hydrocarbon reservoirs surrounding the well.<sup>4</sup> Halliburton also knew that BP had not properly prepared the annulus for the cement job by performing a bottoms up circulation, and that BP was not planning to use the recommended number of centralizers on the casing pipe.

306. This cementing job was intended to fill the annulus between the casing and the well bore and seal off the hydrocarbon-filled formations, as well as plug the bottom of the casing pipe to prevent an influx. The composition of the cement mixture (“slurry”) that Halliburton chose for the task would have to allow the cement to be effectively placed and fully set within the narrow range of safe operating pressures at the bottom of the well. During placement, the slurry would have to be light enough to avoid fracturing the brittle formations surrounding the well, but once set, the slurry would have to be strong enough to resist the intense, nearly 12,000 psi pressure of the hydrocarbon reservoirs within those formations, securely sealing the annular space between the casing and surrounding formations, isolating the hydrocarbon reservoirs from

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<sup>4</sup> The ratio of gas to oil in the hydrocarbon reservoirs is significant because it increases the likelihood that gas will permeate the cement as it is setting, channeling and weakening the cement, and preventing it from forming a secure seal against hydrocarbon pressure.

the well. Despite these challenges, Drilling Defendants, including BP and Halliburton, improperly designed the cement slurry and failed to thoroughly conduct and/or review the results of laboratory testing of the cement slurry stability under conditions that would be found in the Macondo well.

307. Halliburton ultimately recommended a foamed cement mixture to seal the bottom of the Macondo well. Foam cement is cement that has been injected with nitrogen gas to lower its density. But high temperatures and pressures in wells like Macondo can have unpredictable effects on the nitrogen in the cement, leading to instability and weakness that prevents the cement from forming a secure seal in the well.

308. On October 28, 2010, Fred Bartlitt, Jr., the lead investigator for the presidential commission investigating the Spill, reported that tests conducted by Halliburton in February 2010 on a cement slurry similar to that used to secure the Macondo well showed instability under conditions like those found at the bottom of the Macondo well.

309. Halliburton and BP already knew the Macondo well was located in brittle, variable, challenging rock formations laced with volatile high temperature, high pressure, gaseous hydrocarbon reservoirs that had plagued drilling operations in the past. Using Halliburton's recommended cement mixture in Macondo's rock formations was "a recipe for disaster," Robert Bea told the *Washington Post*.

310. The presidential commission's investigators asked Halliburton to provide them with samples of materials like those used at the Macondo well; independent testing of those samples could not generate stable foam cement in the laboratory using the materials provided by Halliburton, which, according to Bartlitt, strongly suggests that the foam cement used at Macondo was unstable during that cement job as well.

311. Independent tests conducted for BP's investigation of the disaster were also unable to generate a stable slurry using a mixture as similar as possible to Halliburton's slurry in conditions like Macondo's.

312. Prior to using its slurry mixture in the Macondo well, Halliburton conducted at least four foam stability tests on it, or on similar formulations, but the tests were incomplete and substandard, and mostly indicated the slurry would not be stable in the Macondo well.

313. In February 2010, Halliburton conducted the first two tests on a cement slurry that was slightly different than that ultimately used; both tests indicated that this foam slurry design was unstable if used in Macondo conditions. According to Bartlitt's report, Halliburton provided the results of the February testing to BP by e-mail on March 8, 2010.

314. Halliburton conducted two other foam stability tests in April 2010, this time using the actual slurry mixture and design ultimately used in the Macondo well. On April 13, seven days before the blowout, testing indicated the foam slurry design was unstable. Bartlitt reports that the results of this test were reported internally within Halliburton by at least April 17, 2010. In a second April test, Halliburton modified the testing procedure and the data indicated, for the first time, that the foam slurry mixture would be stable if used at Macondo. It is not clear if BP received the results of either of the April tests from Halliburton before it allowed Halliburton to begin cementing.

315. Oil industry expert Robert Bea told the Washington Post that drillers will often run one test on a proposed cement mixture, then a second test as a backup. Bea considered Halliburton's four tests "unusual... [T]hat's telling me they were having trouble getting to a stable design."

316. Despite the four tests Halliburton did run on the slurry mixture, the testing was

not comprehensive, thorough, or consistent with industry standards. For example, as BP's investigation team noted, Halliburton did not provide results for such commonly tested cement slurry parameters as fluid loss, free water, foam/spacer/mud compatibility, static gel strength transition time, zero gel time, or settlement.

317. Bartlitt reported to the presidential commission that, taken together, the Halliburton documents indicated that:

- (a) Only one of the four tests .... that Halliburton ran on the various slurry designs for the final cement job at the Macondo well indicated that the slurry design would be stable;
- (b) Halliburton may not have had — and BP did not have — the results of that test [showing stable results] before the evening of April 20, meaning that the cement job may have been pumped without any lab results indicating that the foam cement slurry would be stable;
- (c) Halliburton and BP both had results in March showing that a very similar foam slurry design to the one actually pumped at the Macondo well would be unstable, but neither acted upon that data; and
- (d) Halliburton (and perhaps BP) should have considered redesigning the foam slurry before pumping it at the Macondo well.

318. In addition to having seen slurry test results showing the instability of Halliburton's proposed cement mixture, BP was also aware of the incomplete, substandard nature of Halliburton's tests, which failed to provide results for several commonly tested parameters. Nevertheless, BP did not insist that Halliburton reformulate its cement slurry or perform the missing standard tests before proceeding with this tricky and important final cement

job. Indeed, in its rush to complete the well, BP likely charged ahead having only ever seen Halliburton's first three slurry test reports – all of which indicated the cement would be unstable in the well.

319. Unstable foam cement slurry can result in nitrogen breakout, when bubbles of nitrogen create tiny holes in the cement as it is setting, leaving the cement porous and unable to form a seal against the hydrocarbon pressure. Nitrogen breakout not only jeopardizes the foam cement itself, but can also contaminate the other types of cement it is pumped with, interfering with their proper placement and/or degrading their ability to form a secure seal. Nitrogen breakout in the unstable foam slurry used at Macondo could have weakened the denser, non-foamed cement used to plug the very bottom of the last casing pipe, leaving it also unable to withstand the pressure of the hydrocarbons surrounding the well.

320. In addition to the formulation of the cement mixture, the volume of cement used is another factor in ensuring a successful cement job. Halliburton used a small volume of cement for this last section of the Macondo well. According to the interim report by the National Academy of Engineering (“NAE”) scientists investigating the Spill, the concern with using a small volume of cement is “the potential for contamination of the entire slurry volume simply because less cement is present.” This was especially relevant at Macondo, where the high gas-to-oil ratio in the hydrocarbon reservoirs surrounding the well presented a risk of gas contaminating the cement during the setting process.

321. The NAE panel also expressed concern that the flow rate Halliburton chose to use when pumping the cement into the well was too low to achieve “turbulent flow,” a condition that helps push the mud out of the annulus during the cement placement.

322. Given the extremely narrow range of safe operating pressures Drilling Defendants

were faced with in this last section of the well, it was all the more important to monitor well flow during the cementing process, to ensure there were no indications of fluid loss or fracturing of the formations around the bottom of the well. By monitoring the flow of drilling fluid out of the well as the cement is pumped in, it can be confirmed that every barrel of injected cement is associated with a barrel of drilling fluid flowing out of the well. These “full returns” indicate that the cement is displacing mud from the annulus as planned. If less mud flows out of a well than the amount of cement that is pumped in, fluid is being lost, most likely into fractures in the brittle formations.

323. Although BP claimed there were full returns during the last cementing job at Macondo, Halliburton cementer Nathaniel Chaisson testified that there was no monitoring system in place that could have confirmed full returns during cementing operations. Moreover, data presented to the congressional investigators by Halliburton cementer Vincent Tabler indicated that about 80 more barrels of cement were pumped into the well than barrels of mud that flowed out. This fluid loss would indicate that the brittle formations at the bottom of the well had fractured during the cementing process, allowing fluids and cement to escape into the fissures in the rock, and ruining the cement job. During its congressional testimony in September 2010, BP suggested that 50 barrels of the apparent fluid loss were due to compression of nitrogen in the cement. Nevertheless, BP should have had a flow monitoring system in place during the cementing process, and any losses due to nitrogen compression should have been anticipated and compensated for during the interpretation of the flow monitoring data.

**6. Despite Red Flags, Drilling Defendants Skip Crucial “Bond Log” Test of Cement Integrity**

324. After having made risky choices on well design, casing choice, the number of centralizers, skipping the bottoms up circulation, and using an unstable cement slurry, all of



which sharply increased the risk that the cement job would fail, BP then made the unfathomable decision to cancel the “cement bond log” test, which would have checked the integrity of the completed cement job by using an imaging tool to gauge the thickness of the cement, and to determine if the cement was properly bonded to the casing and the rock formations surrounding the well.

325. This decision was again contrary to BP’s own original drilling plan, which included the cement bond log test. Skipping the cement bond log was also contrary to BP’s own internal standards, which do not consider full fluid returns a “proven cement evaluation technique,” and furthermore require a cement bond log test if a well’s cement design provides for less than 1000 feet of cement above the highest hydrocarbon layer — BP’s Macondo plan only provided for 500 feet.

326. But despite its own drilling plan, internal standards, and the simulations predicting cement failure, and despite warnings from its contractors and its employees regarding the risk of cement failure due to well design and insufficient centralizers, BP again rewrote its drilling plan on the fly, cancelling the cement bond log test and turning back the team from Schlumberger Ltd. that had arrived on the drilling vessel specifically and solely to perform the test.

327. BP’s only reasoning for skipping this absolutely critical and required test seems to have been a savings of approximately \$128,000 and less than 12 hours of work.

328. Gordon Aaker, Jr., an engineering consultant hired by the Congressional committee investigating the disaster, testified that it was “unheard of” and “horribly negligent” not to perform a cement bond log test on a well using a single casing design like the Macondo’s.

329. Moreover, skipping the test was a violation of MMS regulations, which require

that a cement bond log test be conducted if there are indications of an inadequate cement job. 30 C.F.R. § 250.428.

330. Tommy Roth, a Halliburton Vice President of Cementing, also said BP should have conducted a cement bond log: “If the cement is to be relied upon as an effective barrier, the well owner must perform a cement evaluation as part of a comprehensive system integrity test.” Yet on board the Deepwater Horizon, neither Halliburton nor any of the other Drilling Defendants called to stop work or otherwise insisted that BP run the cement bond log test before proceeding.

#### **7. The Casing Hanger Lockdown Sleeve: Another Skipped Safety Precaution**

331. As discussed above, the riskier long string well design Drilling Defendants chose for Macondo meant that there were only two barriers to a hydrocarbon blowout: Halliburton’s cement job isolating the hydrocarbon reservoirs from the well and the seal assembly at the wellhead on the sea floor. Given the insufficient number of centralizers, the failure to run a bottoms up mud circulation prior to cementing, and the results of Halliburton’s and BP’s own simulations, the risk of a failed cement job at Macondo was already high, making the strength and integrity of the seal assembly at the wellhead — the second and final barrier against a blowout — paramount. Yet here again BP made a decision based on time and money rather than well, worker, and environmental safety: it did not deploy the casing hanger lockdown sleeve that would have prevented the wellhead seal from being broken by pressure from below, as it likely was on April 20, 2010.

332. A casing hanger lockdown sleeve ties down the seal assembly at the top of a well, providing an extra layer of protection against a blowout, much like the wire cage over the cork on a champagne bottle. During drilling, heavy mud counters the pressure from the hydrocarbons

around the well, preventing their influx into the annulus and the casing. Once the well is properly sealed, with the cement isolating the pressurized hydrocarbons from the well, the heavy mud is pumped out and replaced by less dense seawater. Usually the casing hanger lockdown sleeve is deployed before the heavy drilling mud is pumped out of the well, so that it can offer an extra shield against any problems during and after the mud displacement process.

333. Contrary to industry standard, BP's plan was to deploy the casing hanger lockdown sleeve *after* the heavy mud had been displaced with seawater. A well design expert at another major oil company expressed surprise at BP's choice to displace the mud before deploying the casing hanger lockdown sleeve, saying it was "not the norm." BP had chosen to shake the champagne bottle with only a faulty cork — Halliburton's unsound cement job — standing in the way of disaster.

**H. Unorthodox Spacer Fluid Mixture and Volume Potentially Interfered with Pressure Tests and BOP Functionality**

334. BP and the other Drilling Defendants were so focused on speed that they could not even wait the 72 hours required for the cement job to fully set before pressing forward with the mud displacement. Without the heavy drilling mud to counter the reservoir pressure, any hydrocarbon influx into the well could turn dangerous very quickly, with only comparatively light seawater blocking the path up through the well and the riser to the surface. Given the danger of hydrocarbons springing through a faulty, unset cement job, Halliburton should not have permitted BP to begin mud displacement unless it was absolutely certain that its cement job had successfully isolated the hydrocarbon reservoirs and sealed the well, yet there is no evidence that Halliburton ever protested BP's premature mud displacement.

335. Unlike Halliburton, Transocean officials did initially protest BP's displacement plan, getting into a "skirmish" with a BP official at a meeting about the drilling procedures. But

even so, Transocean never exercised its right to stop work on the well in protest of BP's unsafe plan, and indeed soon acquiesced to BP's desire to rush the mud displacement at Macondo.

336. On the morning of April 20, 2010, the day of the blowout, BP informed M-I drilling fluid specialist Leo Lindner that the mud displacement would be more substantial than usual, displacing the top 8,367 feet of mud in the riser and drilling string, instead of the typical 300 feet. In his congressional testimony, Lindner did not mention why BP was displacing almost 28 times the usual amount of heavy mud, nor did he say that he questioned the decision, despite its atypicality.

337. Lindner calculated a mud displacement plan according to BP's specifications, including the suspension of the displacement procedure partway through to allow for pressure testing of Halliburton's recently completed cement job. Lindner testified that he distributed copies of his mud displacement plan to BP, Transocean, and M-I employees on the drilling vessel; thus some, if not all, of the Drilling Defendants were aware of and complicit in BP's plan to displace an unusually large amount of mud from the well, without the added safety of the casing hanger lockdown sleeve, and beginning before the cement had even fully set and been pressure tested.

**I. Drilling Defendants Ignore and Overlook Warning Signs of the Imminent Blowout**

338. Two types of pressure tests are used to confirm the integrity of a well. The integrity of the casing pipes and assembly is assessed with a "positive pressure" test, which involves increasing pressure in the casing string and observing the pressure response. If the increase in pressure bleeds off, it indicates a problem with the pressure integrity of the casing: the pumped-in pressure is escaping through a leak somewhere along the line. However, if the increased pressure stays constant, it does not necessarily mean the casing assembly is secure —

the external pressure from the hydrocarbons around the well can be sufficient to maintain the increased pressure reading in the casing string even if there is a breach. Thus, a negative result (where the pressure leaks off) is useful because it is diagnostic of a leaky casing string. A positive result (where the pressure remains constant), is not diagnostic of a secure casing string or a leaky casing string, and basically tells workers nothing about the integrity of a well's casing and pipe assembly.

339. On April 20, 2010, the Macondo well had a positive result to its positive pressure test, which neither confirmed nor denied the integrity of its casing string.

340. At around noon on April 20, 2010, after the completion of the positive pressure test, drilling vessel workers began the mud displacement process. According to M-I's mud displacement plan, the displacement would proceed until the spacer fluid had been pumped down to a level 12 feet above the BOP, after which the displacement would be suspended for the negative pressure test.

341. The BOP's annular preventer was closed to seal casing string for the negative test, but for some reason did not form a secure seal, which allowed about 50 barrels of spacer fluid to leak through the BOP and into the well. This meant that dense, viscous spacer fluid was across the inlets to several small-bore pipes that were to be used for the negative pressure test, rather than the plain seawater that should have been across the pipe inlets. Drilling Defendants were aware of this spacer fluid leakage and the potential for the viscous fluid to be blocking the small-bore pipes necessary for the negative pressure test, yet they took no steps to remedy the situation.

342. The negative pressure tests were intended to assess the security of Halliburton's cement job at the bottom of the Macondo well. With the casing string sealed, pressure was bled off from inside the well, "underbalancing" it by reducing the pressure in the casing until the

external pressure from the hydrocarbon reservoirs surrounding the well was greater than the internal pressure within the casing itself. If Halliburton's cement job had securely sealed the hydrocarbon reservoirs off from the well, there would be little to no fluid flow out of the well and the pressure in the casing would remain at the reduced, underbalanced level. An increase in pressure or flow would indicate that the cement job was not secure, and was allowing hydrocarbons to flow into the well and repressurize the casing string.

343. Drilling Defendants' two negative pressure tests on the Macondo well both yielded abnormal results. In one instance, over four times the expected fluid returns spurted out of the well after the pressure was reduced to an underbalanced state. In the other test, the pressure in the well *increased* from 50 psi to 1,400 psi – a highly diagnostic “red flag” result indicating that Halliburton's cement job had failed to seal off the well from the surrounding hydrocarbon reservoirs. The 1,400 psi pressure response and the excess fluid returns were indications that hydrocarbons were flowing into the well, re-pressurizing it after it had been underbalanced for the negative pressure test. The pressure tests themselves may have further damaged and weakened the cement in the well. Not only were the tests performed before the cement had a full 72 hours to set completely, but contrary to common practice, the drill string was 10,000 feet above the bottom of the well during the tests.

344. It is also possible that the pressure tests themselves further damaged and weakened the cement in the well. Not only were the tests performed before the cement had a full 72 hours to set completely, but contrary to common practice, the drill string was 10,000 feet above the bottom of the well during the tests.

345. Experts later testified that BP's interpretation of the pressure tests was not industry standard, while BP itself admitted to Congressional investigators that continuing work

on the well after such alarming test results may have been a “fundamental mistake.” In May 2010, BP admitted to congressional investigators that these pressure test results were clear warning signs of a “very large abnormality” in the well.

346. Later, in its September 8, 2010, disaster investigation report, BP concluded that the negative pressure test result of 1,400 psi was misinterpreted by Transocean and BP employees on the Deepwater Horizon, leading the vessel crew to the erroneous view that the test was a success and well integrity had been established. Moreover, BP’s investigation found no evidence that the drilling vessel’s workers consulted anyone outside their teams on the vessel or onshore about the abnormal pressure reading, as they should have, before coming to their incorrect conclusion that the well was secure. The well site leader should have called experts on the drilling vessel or on the beach to discuss the results, BP Vice President Steve Robinson testified in congressional hearings in December 2010.

347. Halliburton was also grossly negligent in ignoring the pressure test results and not insisting that a remedial cement job be done right away to correct the imperfections in the cement. Given its experience and expertise with cementing wells, and the recent disaster its poor cementing work had caused at the Montara well off Australia, Halliburton was certainly aware of the environmental and safety risks of a failed cement job, yet it did not insist that the appropriate action be taken to correct the Macondo well’s cement seal.

348. In their November 16, 2010, interim report, the NAE panel wrote that “it is clear that pressure buildup or flow out of a well is an irrefutable sign that the cement did not establish a flow barrier” against the entry of hydrocarbons into the well. At Macondo, there was both pressure buildup to 1400 psi and unexpected flow out of the well during the negative pressure tests.

349. There was only one appropriate response to these abnormal negative pressure test results: remedial cement work to correct Halliburton's obviously-flawed cement job and shore up the seal against the highly pressurized hydrocarbon reservoirs. Drilling Defendants, however, elected to ignore the "red flag" results of these, the only cement integrity tests they had even bothered to perform, and continue with their well completion plan as if Halliburton's cement job had been a success.

**J. Attempts at Well Control: Too Little, Too Late**

350. During the mud displacement process, two or more of the Drilling Defendants, specifically including BP and M-I, used an unconventional fluid mixture — and an unusually large volume of it — as "spacer" fluid. This novel composition and amount of fluid may have interfered with the negative pressure test results and/or caused damage or clogging in the BOP.

351. In oil wells, a "spacer" is a fluid used to create a division between two other fluids, with the spacer fluid physically preventing the two other fluids from coming into contact and mixing with or contaminating one another. In the mud displacement process at Macondo, the spacer was intended to separate the synthetic drilling mud from the seawater displacing it.

352. Spacer fluid is usually water-based mud, but according to testimony from M-I drilling fluid specialist Leo Lindner, an uncommon mixture of fluids was used as a spacer during the Macondo well's mud displacement process. Instead of mixing a batch of the usual water-based mud spacer fluid, Lindner combined two "pills"<sup>5</sup> of lost circulation material ("LCM") that had been previously prepared for use in the event of any fluid loss during the cementing job. Unlike the water-based mud typically used as spacer, LCM pills are highly viscous fluid that coagulates to create an extremely thick, stringy mass intended to fill the lost circulation zone,

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<sup>5</sup> A "pill" is any small (<200 barrels) quantity of fluid particularly formulated for a specific task that regular drilling fluid cannot perform, such as prevention of circulation fluid loss.



clogging fractures in the rock so that other drilling fluids can no longer escape into the formation. Lindner testified that it was “not common” to use LCM as a spacer, and that he had never done so before, but that BP, Transocean, and MI employees on the Deepwater Horizon were all aware of the unorthodox LCM-based spacer and either approved the use or allowed it to occur without comment.

353. In addition to the atypical composition of spacer Drilling Defendants used in the Macondo well, the volume of that fluid used was also nonstandard. Lindner testified that normally a spacer is around 200 barrels of fluid, but in the Macondo well, the two LCM pills that were used as spacer had a combined volume over twice as large: 450 barrels.

354. Upon information and belief, Drilling Defendants used this aberrant fluid composition and volume as spacer in the Macondo well solely to skirt environmental regulations that would have required more costly and time-consuming hazardous waster disposal procedures for the two unused LCM pills.

355. As discussed above, the LCM used as a spacer leaked past the annular preventer through the BOP and into the well before the negative pressure test was run. Drilling Defendants’ unusual use of LCM as spacer fluid could have confounded the negative pressure test results by blocking the small-bore pipes used for the tests, and could have negatively affected the functionality and effectiveness of the BOP itself.

**K. Faulty Vessel Safety Equipment Exacerbates the Blowout, Causing Vessel Explosions, Fire, and Sinking**

356. Constantly monitoring a well for signs of hydrocarbon influx is so vital for well safety that it is common practice in the industry for employees of several companies on a drilling vessel – the mud-logging company, the drilling contractor, and the lease operator – to focus on it and be ready to take immediate remedial action, according to the NAE’s interim report.

357. After the litany of flippant, short-cutting operational decisions Drilling Defendants made to save time and money completing the Macondo well, they should have been especially attuned to any signs of trouble from the historically intractable well. But instead of the requisite vigilance, Drilling Defendants had “turned to complacency in the haste to wrap up” operations at Macondo, according to the Deepwater Horizon Study Group, failing to properly monitor the well and ignoring and/or missing an increasingly ominous series of warnings and red flags exhibited by the well in the hours before the fatal blowout.

358. Pressure and flow data from well in the two hours before the blowout should have put Drilling Defendants on notice that there was a problem and that hydrocarbons were leaking into the well. Post-spill review of the real-time data that was available on the drilling vessel on April 20, 2010, showed that the first indications of hydrocarbons flowing into the well started at 8:52 p.m., and went unnoticed by Drilling Defendants. Post-spill modeling indicated that by 9:08 p.m., 39 barrels of hydrocarbons had leaked into the well, but Drilling Defendants still had not noticed the pressure and flow indications of the influx. It was not until 9:41 p.m., a scant four minutes before the blowout, that Drilling Defendants finally noticed that the well was rapidly filling with hydrocarbons and that immediate well control action was needed.

359. At 8:52 p.m., the pumps displacing the heavy mud with seawater were slowed, but instead of flow out of the well decreasing accordingly, as it should have, flow increased — a clear “red flag” indicating that hydrocarbon pressure from the reservoir below was pushing the mud out of the well faster than the seawater that was supposed to be displacing the mud was being pumped in. Yet Drilling Defendants appear to have completely ignored this first red flag and simply carried on with the mud displacement process.

360. From 9:08 p.m. to 9:30 p.m. on the night of the blowout, when the mud

displacement pump was either running at constant flow or was shut off, pressure in the well steadily increased. Modeling data from BP's investigation of the disaster showed that at this point, hydrocarbons were flowing into the well at about nine barrels per minute. Again, this pressure data should have triggered Drilling Defendants to start well-kill operations to restore control over the pressure, but instead the increasing pressure was ignored or overlooked. In congressional testimony from December 2010, Halliburton mudlogger Joseph Keith admitted that he stepped away from his monitors for a coffee break on the night of the blowout; depending on when he took his break, Keith could have missed key data from the well.

361. Throughout the evening of April 20, 2010, the actions of the Deepwater Horizon workers were not consistent with a crew that was suspicious of any problems in the Macondo well. In fact, according to congressional testimony, when contacted by a superior at 9:21 p.m., the toolpusher reported that the negative pressure test result had been "good" and that the mud displacement process was "going fine," neglecting to mention the increased flow out of the well or the increasing well pressure.

362. The mud displacement pumps were shut down completely at around 9:30 p.m., at which point hydrocarbons had been continuously flowing into the well for 38 minutes. Modeling data from BP's disaster investigation showed that about 300 barrels of hydrocarbons had flowed into the well by this time. A few minutes later, at 9:38 p.m., the steadily increasing level of hydrocarbons passed through the wide-open BOP into the riser.

363. Although there may have been some discussion of "differential pressure" in the well once the mud displacement pumps were turned off, there is no other evidence that Drilling Defendants noticed or properly interpreted the many warning signs of the imminent blowout until drilling mud began to spill out of the riser onto the vessel deck at 9:41 p.m., just four

minutes before the blowout.

364. Inexperience may also have affected the choices and competency of the Deepwater Horizon workers during these critical hours. In BP's chain of command for Macondo operations, five employees had less than five months in their respective positions. BP's well site leader Robert Kaluza had mostly land-based drilling experience, and admitted he was working on the Deepwater Horizon "to learn about deepwater." BP also complained to Transocean that turnover on the drilling vessel had been high, including the replacement of experienced drillers with new hires. "Any further dilution of experienced personnel may be detrimental to the performance of the rig," BP told Transocean in an audit last year.

365. Investigators for the safety review commissioned by Transocean itself prior to the Spill found that a lack of hands-on experience for Transocean workers and managers contributed to safety concerns, as many workers were too readily promoted without sufficient on-the-job experience to fully appreciate the risks. "[C]rews are potentially working with a mind-set that they believe they are fully aware of all the hazards when it is highly likely that they are not," the investigators wrote. Moreover, the Deepwater Horizon Study Group found no evidence that any of the drilling vessel workers or onshore employees directly involved with the Macondo well had formal training or qualifications in risk assessment and management of complex systems such as were found aboard the Deepwater Horizon.

366. In addition to carelessness, nonchalance, and/or inexperience causing them to ignore or overlook the harbingers of a blowout, it is also possible that drilling vessel workers, pushed by BP and the other Drilling Defendants to work faster and combine multiple tasks during these final completion operations, were too distracted to properly monitor the well and to notice the alarming signs of imbalance. A BP well site leader said after the disaster that workers

may have taken unusual steps “to save time,” such as performing other tasks simultaneously during the mud displacement process.

367. One vessel worker testified that he was told to clean two tanks during his shift instead of the usual one: “To me it looked like they were trying to rush everything.” A mud logger later testified that he felt uncomfortable with the number of activities being done simultaneously on the day of the blowout.

368. As hydrocarbons were steadily filling the well and mounting towards the riser, vessel workers’ attention was split between mud displacement and other simultaneous tasks like a “sheen test” (which required a change in flow line configuration, depriving workers of data from one of the two flow meters that had been measuring flow from the well until that point), preparations for the upcoming cement plug insertion, the investigation of a problem that had arisen with one of the mud pumps, and the entertainment of BP and Transocean executives ironically onboard to celebrate the Deepwater Horizon’s supposedly spotless safety record.

369. Several of these simultaneously occurring activities impaired vessel workers’ ability to monitor pit fluid levels, effectively eliminating that important source of well flow monitoring information.<sup>6</sup> A few hours after the mud displacement process began at noon, Drilling Defendants began a four-hour offload of mud to the nearby supply vessel M/V Damon Bankston. In addition, some of the mud pits and the trip tanks were being cleaned and emptied during the course of the afternoon. These activities all affected the pit fluid levels, compromising their usefulness as indications of well flow. There is no evidence that Drilling Defendants had any reason to perform these activities during the mud displacement process other

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<sup>6</sup> Pit fluid levels provide well flow information by indicating the volume of fluids at the surface. If the volume of fluid pumped into the well equals the volume of fluid returned from the well, pit levels will remain constant. If there is a hydrocarbon influx flowing into the well, the volume of fluid returned from the well will be larger than the amount pumped into the well.

than time savings.

370. Even if there had been a compelling reason to perform the mud offload and pit cleaning activities simultaneously with the mud displacement process, Drilling Defendants could have preserved the useful monitoring function of pit fluid level information by isolating one or more of the pits for well flow monitoring. At the very least, Drilling Defendants could have begun monitoring pit fluid levels again at 5:17 p.m., once the mud offload task was complete, but there is no evidence that pit fluid levels were ever monitored again that afternoon or evening.

371. The multiple distractions and interference with well data caused by the drilling vessel crew's multitasking left them unable to "detect, analyze, and effectively react to the developing blowout," according to the Deepwater Horizon Study Group. The Group also noted that "perils of parallel processing" have underlain past oil and gas disasters such as the Piper Alpha blowout in the North Sea, and the Exxon Valdez crash. Just as sending text messages and driving a car are each individually safe tasks that can be deadly when combined, the tasks the Deepwater Horizon's crew were performing simultaneously fractured their attention at critical times, with catastrophic results.

**L. Drilling Defendants' Culture of Complacency**

372. While the Deepwater Horizon's crew was distractedly working miles above, highly-pressurized hydrocarbons leaked through Halliburton's faulty, channeled cement and into the casing string of the Macondo well. Several investigations have concluded that the hydrocarbons flowed into the well through the bottom of the last section of casing pipe, flowing up the casing string, and through the BOP and riser to the surface.

373. Because of their inattention to proper well monitoring during the mud displacement process, the first sign of this hydrocarbon influx Drilling Defendants seemed to notice was the mud that began spilling out of the riser onto the vessel deck at about 9:41 p.m.,

49 minutes after the leak had started at the bottom of the well.

374. For emergencies like this one, Drilling Defendants' policies and instructions regarding well control procedures for their vessel workers were woefully inadequate. The procedures only contemplated relatively small influxes into the well, and did not provide guidance on what to do if the initial procedures fail to stop the influx, or whether and when to activate emergency BOP functions such as the emergency disconnect system.

375. In response to the mud spurting out of the riser at 9:41 p.m., the drilling vessel crew diverted flow from the well into the mud-gas separator, a device used to separate gas out of the drilling fluid and vent it safely into the air. This diversion would have been the correct protocol if this incident had been a mere kick. But for a blowout caused by hundreds of barrels of hydrocarbons blasting out of the well, the decision to divert well flow through the mud-gas separator only exacerbated the disaster.

376. Diversion to the mud-gas separator not only contributed to the explosions on the Deepwater Horizon, but it likely caused them to happen sooner than they might have if well flow had been directed overboard instead. The gas venting pipes on the Deepwater Horizon's mud-gas separator were goose-necked, which meant they directed the vented gas downwards towards the vessel. When huge volumes of gas began to hiss out of the Macondo well, these goosenecked vents effectively spread highly flammable gas all over the vessel's decks, increasing the likelihood that the gas would find an ignition source.<sup>7</sup>

377. The volume and pressure of the gas rushing out of the well eventually overwhelmed the mud-gas separator entirely, bursting its seals, and allowing the gas to spread

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<sup>7</sup> Hydrocarbons are in both gaseous and fluid forms in reservoirs, but since gas is less dense than oil, it blew out of the well ahead of the fluid oil. Thus gas spewed out of the well onto the Deepwater Horizon, and later oil (and gas-oil mix) gushed out of the well into the Gulf of Mexico.

directly under the vessel deck as well, effectively enveloping the Deepwater Horizon in a highly flammable cloud of gas.

378. The blowout worsened as the high pressure gas flow caused the failure of surface equipment on the drilling vessel, most of which was rated to withstand only 60 – 100 psi. As each of these seals and systems gave way under the immense pressure, additional flow paths were opened and the blowout gained strength.

379. The drilling vessel workers, following Transocean's insufficient well shut-in protocol, closed two of the BOP's non-shearing rams, which eventually sealed around the drill pipe at 9:47 p.m. At this point, all flow paths from the well to the drilling vessel were sealed off except for the drill pipe. Flow up the drill pipe was prevented by pressure in that pipe. With the BOP rams now blocking hydrocarbons from entering the riser along the sides of the drill pipe, the blowout could have been contained at this point, had the gas on the drilling vessel not exploded.

**M. Defendants Misrepresent the Severity of the Spill and their Oil Spill Response Capabilities**

380. Investigations and testimony suggest that the initial explosion on the Deepwater Horizon on the night of April 20, 2010, was caused by an engine on the vessel deck that sucked in the gas blasting down on the decks from the mud-gas separator vents.

381. Gas sensors, designed to shut down vessel engines when dangerous vapors are present, are critical to preventing explosions in such situations. Testifying before investigators in May 2010, the Transocean rig mechanic Douglas Brown said gas sensors — and the emergency engine shutdown systems connected to them — were not operational aboard the Deepwater Horizon on the night of the blowout. Moreover, the automated feature that should have closed the engine's air intake valves upon sensing gas entering the engine room also failed.



382. Brown further testified that the Deepwater Horizon's engine room was not equipped with a gas alarm system that could have shut off the power. The installation and maintenance of these sensors, alarms, and emergency shutdown systems on the Deepwater Horizon were the responsibility of Transocean, the vessel's owner.

383. At approximately 9:48 p.m., the gas sucked into one of the Deepwater Horizon's engines caused it to begin to overspeed. The vessel lost power less than a minute later, almost immediately followed by two explosions, which ignited the gas enveloping the vessel. The blaze intensified as damage from the explosions and fire opened new flow paths for the flammable gaseous hydrocarbons spewing out of the well. BP's investigators found potential flow paths through the mud pumps and through the top of the drill string, as well as the possibility that movement of the drill pipe broke the seal that the BOP rams had made around the drill pipe, re-opening the direct flow path from the casing into the riser. Via all or some of these flow paths, gaseous hydrocarbons poured onto the vessel, feeding the inferno that engulfed the Deepwater Horizon and ultimately killed 11 crew members, injured 17 others, and destroyed the vessel.

## **2. The Failure of the BOP**

384. Immediately after the explosion, desperate vessel workers tried in vain to activate the emergency disconnect sequence on the Deepwater Horizon's BOP. As reports and testimony have shown, problems and failures with each of the BOP's emergency activation methods prevented the use of the Deepwater Horizon's BOP to seal the well, paralyzing its powerful shear rams that should have slammed shut, severing the drill pipe, and quelling the blowout.

385. The Macondo well's Cameron-manufactured BOP had several emergency activation methods: the high-pressure closure of the blind shear ram, the emergency disconnect

sequence<sup>8</sup> (“EDS”), the automatic mode function<sup>9</sup> (“AMF”), and activation via remotely operated vehicles (ROVs) on the seafloor using the “hot stab”<sup>10</sup> or autoshear<sup>11</sup> functions. None of these were able to activate the BOP to seal the well.

386. The explosions and fire on the Deepwater Horizon disabled the only two emergency activation methods available to workers on the vessel: the high-pressure closure of the blind shear ram and the EDS. From the BOP control panels on the vessel, workers could push buttons for either of these functions, but both required communication with the BOP itself via multiplex cables running from the vessel to the BOP on the seafloor. On the vessel, these multiplex cables were not protected against explosions or fire; according to BP’s disaster investigation, it is likely that they were damaged during or immediately after the first explosion, effectively disabling the vessel workers’ ability to communicate with the BOP.

387. According to his own testimony, and that of several witnesses, Transocean subsea supervisor Christopher Pleasant pressed the EDS button after the explosions. “Everything in the [BOP control] panel did like was supposed to at the panel, but it never left the panel,” Pleasant testified, which supports the likelihood that damage to the multiplex cables on the vessel severed communication between the vessel and the BOP after the explosions.

388. The AMF sequence initiates when electrical power, communications, and

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<sup>8</sup> The EDS disconnects the drilling vessel from the well by detaching the riser from the top of the BOP, allowing the vessel to move away from the well. The EDS also triggers the closure of the blind shear ram to seal off the well itself.

<sup>9</sup> The AMF is activated when electricity, hydraulics, and communications from the drilling vessel are all severed. Powered by hydraulic pressure from accumulators and batteries on the BOP itself, the AMF’s functionality is independent from the vessel and is not affected by loss of power or hydraulics on the vessel itself.

<sup>10</sup> An ROV can activate certain BOP functions, such as the blind shear ram, by performing a hot stab, injecting hydraulic fluid into dedicated ports on the BOP to close the rams.

<sup>11</sup> An ROV can activate the autoshear function by snipping a rod on the BOP, triggering the closure of the blind shear ram.

hydraulic pressure are lost to both control pods on the BOP, circumstances that were certainly satisfied once the multiplex cables and the also-unprotected hydraulic conduit hose on the Deepwater Horizon were damaged by the explosions and/or fire. But poor maintenance of the BOP itself prevented the completion of the AMF sequence to close the blind shear ram.

389. The Deepwater Horizon's BOP had two independent control pods, a redundancy intended to reduce the risk that control pod failure would jeopardize BOP functionality, but Transocean's shoddy BOP maintenance prevented either of the two pods from completing the AMF sequence on the night of the blowout. Examination and tests performed on the control pods after the disaster found a faulty solenoid valve and one battery with low charge in one pod, and two dead batteries in the other pod. Investigators concluded that these problems existed prior to April 20, 2010, and were significant enough to prevent either control pod from completing the AMF sequence to close the BOP's blind shear ram.

390. BOP maintenance was Transocean's responsibility, but BP and the other Drilling Defendants were aware of Transocean's infrequent and inadequate maintenance of the device. The faulty solenoid valve on one of the control pods would have shown up on the BOP control diagnostic system on board the drilling vessel, which was accessible to all and should have alerted all of the Drilling Defendants to the problem.

391. Transocean's BOP maintenance records from 2001 to 2010, which were also available to Drilling Defendants at all times, indicate that the control pod batteries were changed far less frequently than the manufacturer's recommended annual replacement. Unlike the solenoid valve failure, the BOP's diagnostic function would not have shown a low battery charge, all the more reason for Transocean to proactively change the batteries frequently to avoid failure. But, as the other Drilling Defendants knew, Transocean had neglected the BOP batteries

before – a November 2007 activity report recorded that when the BOP was brought to the surface, all of the batteries in one of the pods were dead.

392. Beyond these specific BOP maintenance issues, Drilling Defendants were also aware that during the entire duration of operations at Macondo, the Deepwater Horizon's BOP was out of certification and long overdue for extensive maintenance and repair. Although the BOP's manufacturer, Cameron, required manufacturer testing of the device every five years, the Deepwater Horizon's BOP had not been sent to Cameron for inspection since 2000.

393. The BOP had not undergone a thorough series of maintenance checks since 2005, despite the significant problems uncovered within the device during that inspection. According to Transocean maintenance documents from the 2005 inspection, the BOP's control panels gave unusual pressure readings and flashed inexplicable alarm signals, while a "hot line" connecting the vessel to the BOP was leaking fluid badly. An independent engineering company was hired to assess the BOP, but could not perform all of its examinations — including verification that the Deepwater Horizon's BOP could effectively shear drill pipe and seal off wells in high pressure, deepwater conditions — because the BOP was in use and inaccessible on the sea floor, and BP and Transocean would not stop work to bring it up.

394. A Transocean-commissioned independent audit of the vessel in April 2010, just before the blowout, again revealed a range of problems with the Deepwater Horizon's BOP, including a leaking door seal, pump parts needing replacement, error-response messages, and "extraordinary difficulties" surrounding the maintenance of the BOP's annular valves. BP well site leader Ronald Sepulvado testified in August 2010 that he too had raised concerns about Transocean's maintenance of the BOP, reporting that several pieces of equipment had been out of service for extended periods of time, but that Transocean "always told me that they didn't

have the parts” to make the necessary repairs.

395. In keeping with its lax approach to BOP maintenance, Transocean had also failed to recertify the Deepwater Horizon’s BOP, as required by federal regulations, because recertification would require a full disassembly of the device and more than 90 days of downtime. During his congressional testimony, one Transocean subsea supervisor brushed off the need for BOP recertification, testifying that Transocean considered it sufficient to simply monitor the device's condition while it was in use, rather than having to bring it to dry dock to get a full recertification.

396. In its disaster investigation, BP noted that Transocean did not record well control-related equipment maintenance, including that of the BOP, accurately or completely in the regular maintenance management system, sometimes even recording work performed on the BOP that could not possibly have taken place since the BOP was in use on the seafloor at the time of the supposed repair.

397. After the explosions, as the Deepwater Horizon was burning on the surface, emergency responders sent ROVs to the sea floor to attempt to close the blind shear ram using the “hot stab” or autoshear functions. Several hot stab attempts to close the blind shear ram failed due to insufficient hydraulic pressure. Over the course of these events, a number of leaks were discovered in the BOP’s hydraulic system, as well as incorrect hydraulic plumbing from the ROV intervention panel to the pipe rams, which was likely the result of aftermarket modifications to the BOP.

398. Hydraulic system integrity is critical to the proper functioning of a BOP. Hydraulic pressure supplies the force used to close the various rams in the device — if there is insufficient hydraulic pressure due to leaks, the system will not be powerful enough to close the

rams with enough pressure to create a seal against highly pressurized hydrocarbons in the well.

399. Ultimately six leaks were discovered in the hydraulic system of the Macondo well's BOP. From investigation and testimony, Drilling Defendants were aware of at least two, but likely almost all, of these leaks prior to April 20, 2010. One leak was discovered as early as February 2010, but was never repaired or otherwise addressed by Drilling Defendants. Vessel workers testified to awareness of other leaks during their congressional testimony. Not least, the weekly BOP function tests should have made Drilling Defendants aware of the other hydraulic system leaks identified during the ROV intervention.

400. Drilling Defendants were also aware of the aftermarket modifications that hindered the emergency responders' ability to activate the BOP via hot stab procedures. In addition to incorrectly installed aftermarket hydraulic plumbing, Drilling Defendants had switched out one of the Deepwater Horizon's variable bore rams with a non-functional test ram. But after the blowout, emergency responders spent a day futilely trying to close that missing variable bore ram, not knowing it had been replaced with a useless test part, because Drilling Defendants hadn't updated the BOP's schematic diagram to reflect the aftermarket changes – a violation of 29 C.F.R. § 1910.119, which requires, *inter alia*, up-to-date process and safety system equipment drawings as a part of basic process safety management.

401. Drilling Defendant officials were aware of the faulty solenoid valve, poor battery maintenance, hydraulic fluid leaks, and aftermarket modifications on the Deepwater Horizon's BOP long before the April 20, 2010, but no action was ever taken to address the problems, perhaps because additional delays and costs would accrue as all well work stopped and the BOP was raised from the sea floor for repairs. In addition to posing a significant safety risk, Drilling Defendants' choice to continue drilling with a faulty hydraulic system violated federal

regulations, which require companies to disclose problems to the MMS and to stop drilling if either of a BOP's two control systems is not working properly.

402. Despite vessel workers' efforts just after the blowout, and emergency engineers' efforts in the weeks after the blowout and sinking, the Deepwater Horizon's blind shear ram never successfully sealed the well. Although tests determined that the ROVs had activated the high-pressure blind shear ram close function by cutting the autoshear rod, the well continued to spew oil into the Gulf of Mexico. Investigations thus far have been unable to conclude why the blind shear ram failed to seal the well, but possible causes include insufficient hydraulic power to shear the drill pipe and seal the well, or seal failure due to the high pressure flow of hydrocarbons gushing through the BOP at the time the blind shear ram was attempting to close.

403. As the time of this writing, the official investigation of the BOP retrieved from the seafloor at the Macondo well is still ongoing. Thus Plaintiffs reserve the right to amend this Voluntary Master Complaint Cross-Claim and Third-Party Complaint for Local Governmental Entities once further information from that and any other future investigations becomes available.

404. At the time of the disaster, Drilling Defendants were certainly aware that in addition to increasing the risk of blowouts, deep-sea drilling also increases the risk of BOP failure. Drilling Defendants were also aware that the industry and government had major concerns about the reliability of BOPs like the one installed on the Deepwater Horizon.<sup>12</sup> A 2004 study by Federal regulators showed that BOPs may not function in deep-water drilling

<sup>12</sup> See, e.g. Joint Industry Project (Phase I-Subsea), "Final Report, Blow-out Prevention Equipment Reliability," Report to MMS (May 2009); E. Shanks, "Deepwater BOP Control Systems – A Look at Reliability Issues," Proc. Offshore Technology Conference (2003); Tetrahedron, Inc., "Reliability of Blowout Preventers Tested Under Fourteen and Seven Days Time Interval," Report to MMS (Dec. 1996); Per Holland, "Reliability of Deepwater Subsea Blowout Preventers," Society of Petroleum Engineers (2000); Per Holland and P. Skalle, "Deepwater Kicks and BOP Performance," Report to MMS (July 2001).

environments because of the increased force needed to pinch and cut the stronger pipes used in deep-water drilling. Only three of 74 vessels studied in 2004 had BOPs strong enough to squeeze off and cut the pipe at the water pressures present at the equipment's maximum depth. "This grim snapshot illustrates the lack of preparedness in the industry to shear and seal a well with the last line of defense against a Blowout," the study said. Moreover, the study singled out Defendant Cameron, the manufacturer of the Deepwater Horizon's BOP, for relying on faulty calculations to determine the necessary strength for its BOP equipment to function properly at ultra-deepwater depths.

405. Despite being aware of the risk of the BOP failing at greater depths, Drilling Defendants did not install backup BOP activation systems, backup BOPs or other secondary redundant precautionary measures available to protect the vessel, its workers, Plaintiffs, and the environment from the catastrophic results of a well blowout.

406. The Deepwater Horizon's BOP was outfitted with only one blind shear ram. But blind shear rams are vulnerable to a "single-point failure" — if just one of the small shuttle valves that carry hydraulic fluid to the ram malfunctions, the BOP cannot seal the well. A 2000 report on the Deepwater Horizon's BOP concluded that the shuttle valve was the BOP's weak spot — consultants attributed 56 percent of the BOP's "failure likelihood" to this one small valve — and indeed, evidence suggests that when the Deepwater Horizon crew attempted to activate the BOP's blind shear ram, the ram's blades could not cut through the drill pipe because one or more of the shuttle valves leaked hydraulic fluid.

407. Vulnerabilities like the BOP blind shear ram's single-point failure risk were well understood by Drilling Defendants and the rest of the oil industry. In fact, offshore drillers now commonly add an extra layer of protection against this single-point failure risk by equipping



their BOPs with two blind shear rams. In 2001, when the Deepwater Horizon went into service, Transocean was already equipping its newer drilling vessels with BOPs that could accommodate two blind shear rams, and today 11 of Transocean's 14 Gulf of Mexico vessels have two blind shear rams. (The three that do not were built before the Deepwater Horizon.) Nevertheless, neither Transocean nor BP retrofitted the Deepwater Horizon's BOP with two blind shear rams. BP's explanation was that the drilling vessel needed to carry the BOP from well to well and there were space limitations, but oil industry experts have dismissed that explanation, saying an additional blind shear ram on the BOP would not necessarily have taken up any more space on the vessel.

408. Drilling Defendants were also well aware of the benefits of redundant blind shear rams. In May 2003 the Discoverer Enterprise — a Transocean vessel operated by BP, just like the Deepwater Horizon — was rocked when the riser pipe connecting the vessel to the wellhead cracked open in two places. The BOP was activated and the first blind shear ram closed. After robots checking the integrity of the BOP noticed damage, the second blind shear ram was also closed to provide an extra layer of protection against a blowout. Despite this firsthand experience of the necessity of redundant blind shear rams, BP and Transocean used one of the slots on the BOP for the non-functional test ram, which would save them money by reducing the time it took to conduct certain well tests, instead of installing a second blind shear ram there. In a joint letter, BP and Transocean acknowledged their awareness that installing the test ram instead of a functional ram would “reduce the built-in redundancy” and raise the “risk profile” of the Deepwater Horizon.

409. If the BOP on the Macondo wellhead had been functional and properly manufactured by Cameron and/or maintained by Transocean, it could have been manually or

automatically activated right after the explosion, stopping the blowout at the wellhead, limiting the Spill to a minute fraction of its ultimate severity, and thereby sparing Plaintiffs millions of dollars in losses and damage.

410. Defendants BP, Transocean, and one or more of the other Drilling Defendants, failed to ensure that the BOP present on the Deepwater Horizon possessed reasonably safe, adequate, functional technology to prevent blowouts.

411. Defendants Cameron, BP, and Transocean, and one or more of the other Drilling Defendants, failed to ensure that the Deepwater Horizon's BOP had sufficient, functional, built-in redundancy to eliminate single-point failure modes.

412. Defendants Cameron, BP, and Transocean, and one or more of the other Drilling Defendants, failed to ensure that all foreseeable repairs, if any, and foreseeable modifications, if any, to the Deepwater Horizon's BOP were performed, completed, and tested with the drilling vessel's operations shut down and the well secured.

413. Defendants Cameron, BP, Transocean, and one or more of the other Drilling Defendants, failed to ensure that the testing, if any, of the Deepwater Horizon's BOP was comprehensive, reviewed, and verified, and further failed to check and verify the BOP's entire operating and control system, including but not limited to, checking for leaks at ROV connection points, and verifying the functionality of the AMF and/or autoshear.

414. Defendant Cameron failed to ensure and verify that the BOP it designed, manufactured, marketed, and sold, and which was appurtenant to the Deepwater Horizon drilling vessel, was suitable for the types of drilling conditions, drill pipes, and casing assembly designs that would foreseeably be used during the Deepwater Horizon's drilling and exploration operations.

415. Defendants BP, Transocean, Cameron, and one or more of the other Drilling Defendants, could have ensured that a BOP and/or back-up BOP with sufficient strength and reliability for deepwater drilling was present and available on the Deepwater Horizon, but did not do so.

416. Defendants BP, Transocean, Cameron, and one or more of the other Drilling Defendants, could have installed a back-up acoustic trigger to activate the Deepwater Horizon's BOP in the event that the main trigger failed to activate. In fact, federal regulators at the MMS communicated to one or more of the Drilling Defendants in 2000 that MMS considered a backup BOP activation system to be "an essential component of a deepwater drilling system."

417. Despite this notice, and although the back-up acoustic BOP trigger is a common drilling vessel requirement in other oil-producing nations, including other areas where Drilling Defendants operate, the Deepwater Horizon was not equipped with this back-up acoustic BOP trigger.

418. Defendant Cameron designed and manufactured the Deepwater Horizon's BOP device. Defendant Cameron failed to effectively design the BOP, install sufficiently independent and redundant emergency activation systems on the BOP, or provide adequate warnings, instructions, and guidelines on permissible uses, modifications, and applications of the BOP. The failure of Defendant Cameron's BOP was a cause or contributing factor to the Spill.

### **3. Poor Vessel Maintenance and Reckless Bypass Of Safety Systems**

419. Unfortunately, the BOP was not the only part of the Deepwater Horizon that was poorly maintained and in disrepair at the time of the blowout. Transocean, the vessel's owner, had a history of postponing and ignoring needed maintenance on the Deepwater Horizon, despite concerns raised by its own employees and other vessel workers. In the weeks before the blowout, the Deepwater Horizon suffered power outages, computer glitches, and a balky

propulsion system. In some cases, Transocean officials even purposely overrode or disabled vital safety mechanisms and alarms. When the Macondo well blew out, the Deepwater Horizon's shoddy maintenance facilitated a cascade of failures of multiple emergency systems, exacerbating the disaster.

420. According to testimony given before a federal panel by vessel engineers in August 2010, the Deepwater Horizon had a number of ongoing equipment problems at the time of the blowout, some of which contributed to the failure of backup generators that should have powered safety and shutdown devices immediately after the blowout. Vessel-wide electrical failures had occurred two or three times before April 20, 2010, and the driller's control chair had lost power just a few days prior to the blowout. The primary computer used to control all vessel drilling functions routinely crashed and had to be restarted, interfering with vessel workers' ability to monitor well data. One of the vessel's thrusters, an underwater propeller that helps the floating vessel move and stabilize itself in the water, had been "having problems" for eight months prior to the blowout.

421. Further, the computerized system used to monitor routine maintenance aboard the vessel was not working optimally because glitches from a recent computer system migration had not yet been resolved. Sometimes the computer called for maintenance to be done on equipment that did not exist aboard the vessel, while some pieces of equipment that were aboard the vessel and in need of maintenance were not registered by the computer.

422. Even worse, some key safety systems and alarms on the Deepwater Horizon had been intentionally bypassed or disabled by Transocean. Mike Williams, a chief electronics technician working for Transocean aboard the Deepwater Horizon, testified that on the night of the blowout, a pressure regulator valve, which automatically cuts off gas flow at a certain

pressure point and could have helped stop the blowout, was in “bypass” mode when the gaseous hydrocarbons blew out of the Macondo well. Williams had repeatedly expressed concern about bypassed safety systems to Transocean supervisors, only to be upbraided for his efforts. In one instance, Williams activated a gas safety valve that he thought was erroneously in “bypass” mode. Williams testified that Transocean subsea supervisor Mark Hay reprimanded him for it, saying: “‘The damn thing has been in bypass for five years. Why did you even mess with it?’ ... And [Hay] said, ‘As a matter of fact, the entire fleet [of Transocean drilling vessels] runs them in bypass.’”

423. Williams said a fire alarm system on the vessel was also partially disabled at the time of the blowout, and had been for at least a year since Williams first noticed it. The system was set to “inhibited” mode, meaning that the control panel would indicate a problem, but a general alarm would not sound throughout the vessel unless manually activated. Transocean supervisors told Williams “they did not want people to wake up at 3 a.m. due to false alarms.” Williams testified that he complained regularly about the practice of disabling and bypassing alarms and safety systems; his most recent complaint was just three days prior to the blowout.

424. Upon information and belief, had Transocean not disabled the alarm systems, the system would have sounded alarms just after the blowout, shut down all potential ignition sources, and activated the drilling vessel’s EDS, which would have prevented the explosion and likely saved the lives of the 11 vessel workers who perished in the disaster.

425. When the Deepwater Horizon lost power during the blowout, none of the backup or emergency generators were working — equipment that was on board for the very purpose of providing power to alarm and safety systems in just such an emergency. Transocean employee and Deepwater Horizon chief engineer Stephen Bertone testified that there was no general alarm,

no internal communications, and no power to the vessel's engines. "We were a dead ship." Without power, the crew was also unable to engage the EDS that would have stopped the flow of gas fuelling the fire on the vessel, and many other alarm and safety systems were rendered silent and useless.

426. An equipment assessment commissioned by Transocean in April 2010, just before the blowout, revealed many key components on the Deepwater had not been fully inspected since 2005, and at least 36 components and systems on the vessel were in "bad" or "poor" condition, which "may lead to loss of life, serious injury or environmental damage as a result of inadequate use and/or failure of equipment." The equipment assessment also found problems with the vessel's ballast system that they noted could directly affect the stability of the ship. The assessment found a malfunctioning pressure gauge and multiple leaking parts, and also faulted the decision to use a type of sealant "proven to be a major cause of pump bearing failure."

427. The findings of the Transocean-commissioned equipment assessment echoed the results of a similar BP-commissioned audit that had been conducted in September 2009, which found that Transocean had "overdue planned maintenance considered excessive — 390 jobs amounting to 3,545 man hours [of needed maintenance work]."

428. In a confidential worker survey conducted on the Deepwater Horizon just weeks before the blowout, Transocean employees voiced concerns about poor equipment reliability. One worker noted that the drilling vessel had not once in its nine-year career been taken to dry dock for necessary repairs: "we can only work around so much." Another worker described Transocean's policy of running equipment to failure before making just the bare minimum repairs: "[r]un it, break it, fix it. ... That's how they work."

429. The other Drilling Defendants were all aware of Transocean's poor maintenance

of the Deepwater Horizon and its practice of disabling or bypassing vital safety systems, and alarms, yet none of them called for work to stop until vessel safety was improved, and none of them reported Transocean's actions and inactions to the MMS.

**N. The Spill's Impact on Plaintiffs**

430. All the evidence of Drilling Defendants' misguided priorities and imprudent decisions regarding the Macondo well and the Deepwater Horizon described above is part of a pattern of cocksure behavior — "a culture of complacency," as the chairmen of the presidential commission investigating the Spill called it during a hearing on November 10, 2010. In essence, "[l]eaders did not take serious risks seriously enough and did not identify a risk that proved to be fatal," the commission chairmen said.

431. This complacency was especially deplorable considering the fact that workers and leaders on the Deepwater Horizon had just survived a near miss – the March 8, 2010, influx that went unnoticed for 33 minutes, allowing 40 barrels of hydrocarbons to leak into the well before it was shut in. That brush with disaster should have been a lesson learned for Drilling Defendants, but to the contrary, just six weeks later their haste and carelessness again led them to miss signs of an influx, this time for even longer – 49 minutes – not noticing the breach until it was too late.

432. An independent group of scientists singled out BP in particular for its "lack of discipline" in its operations at Macondo, in an interim report released November 17, 2010. "Numerous decisions to proceed toward abandonment [well completion] despite indications of hazard, such as the results of repeated negative-pressure tests, suggest an insufficient consideration of risk and a lack of operating discipline," according to the 15-member panel of National Academy of Engineering scientists.

433. Moreover, the panel found that BP suffered from a lack of "management

discipline” and problems with “delegation of decision making” on board the Deepwater Horizon. Workers aboard the drilling vessel were often unsure about who was actually in charge, and there was a “lack of on board expertise and of clearly defined responsibilities,” the NAE report said. Poor communication between employees of the various Drilling Defendants also contributed to the confusion on the vessel.

434. As the Deepwater Horizon Study Group put it: “It is the underlying ‘unconscious mind’ that governs the actions of an organization and its personnel.” In the case of the Deepwater Horizon, the cultural influences permeating the Macondo teams – both on the vessel and on the beach – reflected “gross imbalances between production and protection incentives” and manifested in “actions reflective of complacency, excessive risk-taking, and a loss of situational awareness.”

435. Drilling Defendants’ desultory approach to their respective responsibilities regarding the Deepwater Horizon Macondo well was in direct violation of federal regulations intended to maintain public safety. Pursuant to 33 C.F.R. 250.107, Drilling Defendants were required to protect health, safety, property, and the environment by (1) performing all operations in a safe and workmanlike manner; and (2) maintaining all equipment and work areas in a safe condition. They were further required to immediately control, remove, or otherwise correct any hazardous oil and gas accumulation or other health, safety, or fire hazard and use the “best available and safest technology” whenever practical on all exploration, development, and production operations. Drilling Defendants’ violation of these regulatory mandates caused and/or contributed to the Macondo well blowout and the subsequent explosions, fire, sinking, and Spill.

436. This culture of carelessness and impudence was not limited to Drilling



Defendants' actions and decisions on the Deepwater Horizon at the Macondo well. In fact, Drilling Defendants have a history of foolhardy, irresponsible behavior across their operations on land and at sea – a record littered with accidents, spills, regulatory violations, fines, and lawsuits.

437. Defendant BP has an especially sordid history of cutting corners on safety to reduce operating costs. In 2005, a blast at a Texas refinery killed 15 people and injured more than 170; Federal investigators found the explosions were in part due to cost-cutting and poor facility maintenance. Also in 2005, a large production platform in the Gulf of Mexico began listing severely and nearly sank due to a defective control system. And in 2006, four years after being warned to check its pipelines, BP had to shut down part of its Prudhoe Bay oilfield in Alaska after oil leaked from a corroded pipeline. As noted by the Deepwater Horizon Study Group in its second Progress Report, all the investigations of BP's previous disasters "noted that cost cutting, lack of training, poor communication, poor supervision and fatigue were contributors" to the various calamitous incidents.

438. Despite this history of catastrophes and close calls, BP has been chronically unable or unwilling to learn from its many mistakes. The company's dismal safety record and disregard for prudent risk management are the results of a corporate safety culture that has been called into question repeatedly by government regulators and its own internal investigations. BP has consistently demonstrated that it will choose profit before safety at the expense of human lives and the environment. Moreover, the company's actions imply that it would rather pay fines than comply with U.S. law, as paying those fines — if and when its negligence is actually discovered — is ultimately a cheaper long-term strategy than regulatory compliance. This deficient corporate culture has been cited as a primary contributor to previous disasters at BP facilities, and is ultimately to blame for BP's grossly negligent decisions concerning the

Macondo well, decisions made with willful, wanton, and reckless indifference to the foreseeably tragic results to the workers aboard the drilling vessel, the environment, and Plaintiffs.

439. Many of BP's workers at various facilities have voiced complaints about their employer's actions and policies, sometimes in the face of harsh retaliation from supervisors. Former employees, contractors, and oil field workers who worked for and with BP have reported that BP regularly cheated on pressure tests and failed to report leaks and spills to the proper authorities. For example, a BP subsidiary in Carson, California, submitted falsified inspection results to air quality regulators for eight years before it was revealed that the refinery was in a frightening state of disrepair. Instead of running at 99% compliance with regulations, as the falsified reports from BP had indicated, the refinery was actually operating with 80% *noncompliance*. Workers at BP's Alaskan oilfield accused the company of allowing "pencil whipping," or falsifying inspection data, as well as pressuring workers to skip key diagnostics, including pressure testing, cleaning of pipelines, and corrosion checks, in order to cut costs. Workers on the Deepwater Horizon also described "a corporate culture of ...ignoring warning signs ahead of the [April 20th] blast," saying that "BP routinely cut corners and pushed ahead despite concerns about safety." After all, as one Alaska worker was pointedly told when he raised a safety concern: "Safety doesn't make money."

440. Prior incidents, investigations and testimony from Congressional hearings has shown that BP actively discourages workers from reporting safety and environmental problems. Reports from multiple investigations of the Texas City and Alaska disasters all indicate a pattern of intimidating — and sometimes firing — workers who raise safety or environmental concerns. In Alaska, pressure for increased production with fewer safety reports created "an environment where fear of retaliation [for reporting problems] and intimidation did occur." Also in Alaska, a

pipeline safety technician working for a BP contractor was scolded, harassed, and ultimately fired for reporting a crack in a pipe that was dangerously close to an ignition source, despite that other reports indicated he was one of the top-performing employees in his position. “They say it’s your duty to come forward,” he said of BP’s official corporate policies, “but then when you do come forward, they screw you.” In a more extreme example, in the 1990s a BP executive was involved in a scandalous scheme involving spies hired to track down a whistleblower who had leaked information about BP spills to the press.

441. When Tony Hayward took office as CEO of BP p.l.c. in 2007, he pledged to change BP’s culture with a renewed commitment to safety. Yet according to the Occupational Safety and Health Administration (“OSHA”), over the past three years — during which time BP was under Mr. Hayward’s leadership — BP has committed 872 safety violations — most categorized by OSHA as “egregious willful” — a number made even more shocking when compared to BP’s competitors, who average about five violations each. Two refineries owned by BP account for 97 percent of all “flagrant” violations found in the refining industry by government safety inspectors over the last three years. According to a former EPA lawyer involved in the Spill investigations, “none of the other supermajors have an environmental criminal record like they do.”

442. BP’s marginal ethics are well known to its competitors and others in the oil and gas industry, yet other companies, including Defendants, continue to work with BP closely and frequently. For example, BP is one of Halliburton’s largest oil drilling and cement operations customers. Halliburton has worked with BP on a great number of projects over the past decade, despite being aware of BP’s flagrant and pervasive disregard for safety and constant reckless risk-taking in the pursuit of profits. Clearly, Halliburton values the preservation of its lucrative

relationship with BP over its obligations to the MMS, the environment, its employees, Plaintiffs and all the many others plainly within the scope of the foreseeable risk when disaster inevitably struck at Macondo.

443. Like BP, Transocean's corporate culture is also skewed towards profits at the expense of safety, according to the results of the broad review of its North American operations made before the blowout. Workers complained of poor equipment reliability that they attributed to "drilling priorities taking precedence over planned maintenance." "[Transocean] won't send the rig to the shipyard for major refurb that is required in certain areas," said one worker. Transocean's system for tracking health and safety issues on the Deepwater Horizon was "counterproductive," according to nearly all the workers surveyed. Fake data entered into the program in order to circumvent it distorted the perception it gave of safety on the vessel. Moreover, as Mike Williams testified, Transocean's entire fleet of drilling vessels bypassed certain vital safety systems as a matter of practice.

444. Investigators also found that a stifling bureaucracy imposed by onshore management bred resentment among Transocean vessel workers. Workers complained that past problems were only investigated by the company in order to place blame, rather than to learn from the mistakes. Although workers "often saw unsafe behavior at the rig" many expressed fears of reprisals for reporting problems, especially to supervisors based in Houston. This tension between the vessel and the beach likely played a role in discouraging workers on Deepwater Horizon from reporting problems or anomalies like the abnormal negative pressure results to their supervisors onshore.

445. As Defendants internally prioritize profits over safety at every level of their companies, they continue to resist and evade regulation of the oil exploration and production

industry. For example, despite the known vulnerabilities and shortcomings of BOPs in deepwater drilling, this year BP helped finance a study to support their argument that BOP pressure tests should be required with less frequency — every 35 days rather than the current frequency of every 14 days. This change would save the industry \$193 million per year in “lost productivity.” BP has also actively opposed MMS rules requiring drilling vessel lessees and operators to develop and audit their own Safety and Emergency Management Plans, insisting that voluntary compliance will suffice. The Deepwater Horizon disaster is a tragic example to the contrary.

446. Decisions tradeoffs, actions, and inactions by Drilling Defendants, including the risky well design, inadequately tested cement, tests that were skipped or misinterpreted, and procedures that deviated from industry norms, all contributed to, and practically ensured the blowout of the Macondo well. At no time did any of Drilling Defendants report regulatory violations to the authorities, or call to stop work because of unsafe decisions, plans, actions, or conditions in the well or on the vessel. The carelessness, nonchalance, inexperience, and distraction of Drilling Defendants resulted in insufficient well monitoring and overlooking the signs of an influx for 49 minutes prior to the blowout. Once the well blew out, Drilling Defendants’ poor vessel maintenance and intentional bypass of alarms and emergency systems contributed to the failure of safety mechanisms, exacerbated the disaster, and likely caused the unnecessary deaths and injuries of vessel workers, and the destruction of the Deepwater Horizon. Underlying it all, Drilling Defendants’ corporate cultures of trading safety for speed, production, and profit, and encouraging their employees to do the same, sped the inevitable approach of catastrophe.

**O. Defendants Misrepresent the Severity of the Spill and their Oil Spill Response Capabilities**

447. On the night of April 20, after the explosions ignited the vessel, the resulting gas-fueled fire on the Deepwater Horizon raged for two days, as the vessel listed progressively and finally sank on April 22, 2010. On the sea surface, the Deepwater Horizon had been connected to the wellhead at the seafloor by a 5,000-foot marine riser pipe, and as the vessel sank to the seafloor, it dragged the riser down with it, bending and breaking the pipe before finally tearing away from it completely. The riser, bent into a crooked shape underwater, now extended 1,500 feet up from the wellhead and buckled back down. Immediately oil and natural gas began to gush from the open end of the riser and from at least two places along its twisted length.

448. For 87 days, the surge of oil and gas from the gushing well continued unabated, and the Spill's fast-growing oil slick made landfall on April 30, 2010, affecting increasingly larger areas of the Coastal Zone as it was driven landward by currents and winds. Once the oil reached the coasts, it damaged the pristine beaches and delicate wetlands, marshes, and estuaries that line the coasts of the Gulf States, destroying the habitats and spawning sites of marine life, as well as the tourism industry and property values in the Coastal Zone.

449. From the outset, BP attempted to downplay and conceal the severity of the Spill. BP's initial leak estimate of 1,000 barrels per day was found by government investigators to be a fraction of its actual measured leakage amount of 50,000 barrels per day. On or about June 20, 2010, Congressman Edward Markey released an internal BP document showing that the company's own analysis had shown that the rate of oil spillage could reach as high as 100,000 barrels, or 4,200,000 gallons, per day. BP's may have understated the Spill size because certain pollution-related fines against BP will ultimately be calculated based on the volume of oil and other pollutants spilled.

450. BP's obstructionist behavior regarding accurate data continued as the Spill progressed; BP did not provide complete and timely announcements and warnings about the severity, forecast, and trajectory of the Spill, and stymied scientists' efforts to gauge the scope of the disaster on land and at sea. *The New York Times* reported on May 16, 2010, that "BP has resisted entreaties from scientists that they be allowed to use sophisticated instruments at the ocean floor that would give a far more accurate picture of how much oil is really gushing from the well."

451. Just as BP was now understating the severity of the Spill, it soon became clear that BP had previously overstated its ability to respond to a spill. In its Initial EP, submitted prior to beginning work at Macondo, BP had assured the MMS that it could effectively contain any spill of up to 250,000 barrels of oil per day, using "proven equipment and technology." In reality, BP was not at all prepared for an oil spill of any size. The spill-prevention plan BP had submitted to the MMS was an obvious cut-and-paste job that had not been updated to current conditions – not only did it reference Arctic wildlife not indigenous to the Gulf of Mexico, such as walrus, it also listed incorrect and out-of-date contact information for oil spill engineers and experts, including one wildlife expert who died in 2006.

452. BP Chief Operating Officer Doug Suttles admitted on May 10, 2010, that BP did not actually have a response plan with "proven equipment and technology" in place that could contain the Deepwater Horizon Spill. Later, BP p.l.c. CEO Tony Hayward told the BBC that "BP's contingency plans were inadequate," and that the company had been "making it up day to day." In its official statement, BP made essentially the same admission: "All of the techniques being attempted or evaluated to contain the flow of oil on the seabed involve significant uncertainties because they have not been tested in these conditions before."

453. Despite the constant risk of a spill at any one of its many Gulf of Mexico wells, BP did not have a realistic response plan, a containment barge, skimming vessels, a response crew, or recovery material like containment boom ready and available to deploy immediately in an emergency. On the contrary, the Spill response could not begin until the U.S. government, including the Coast Guard and the Navy, brought in skimmers, boom, and other materials, and volunteers were found to assist with the clean up.

454. On May 17, 2010, U.S. Senators Barbara Boxer, Ben Cardin, Frank Lautenberg, Kirsten Gillibrand, Bernie Sanders, Amy Klobuchar, Tom Carper, and Jeff Merkely contacted U.S. Attorney General Eric Holder to specifically request that the U.S. Department of Justice “open an inquiry into whether British Petroleum (BP) made false and misleading statements to the federal government regarding its ability to respond to oil spills in the Gulf of Mexico,” noting:

In the wake of the Deepwater Horizon oil spill, it does not in any way appear that there was “proven equipment and technology” to respond to the spill, which could have tragic consequences for local economies and the natural resources of the Gulf of Mexico. Much of the response and implementation of spill control technologies appears to be taking place on an ad hoc basis.

455. Upon information and belief, BP also hindered efforts to kill the Macondo well and stop the flow of oil and gas into the Gulf waters. Engineers knowledgeable about blowout responses told BP how to kill the well as early as June 2010, but BP, after conferring with its Macondo lease partners Anadarko, Anadarko E&P, and MOEX Offshore, chose to ignore the engineers’ well-kill procedure, because BP did not want to damage the well – or its chance to make a profit at Macondo. Because BP, along with its lease partners, hoped to retap the Macondo well and the large, valuable reservoirs beneath it, they ignored expert well-kill information that could stopped the Spill many weeks earlier.



**P. The Spill's Impact on Plaintiffs, the Environment, and the Coastal Zone Economy**

456. Since the Spill began, unprecedented amounts of raw crude oil, emulsified and weathered oil, natural gas, chemical dispersants, and other toxic pollutants have contaminated the Gulf of Mexico and the Coastal Zone – a total petroleum discharge of 6.9 million barrels, not including the million gallons of chemical dispersants and any other toxic pollutants that were also released as a result of the Spill.

457. The oil released during the Spill contains benzene, toluene, polyaromatic hydrocarbons, and other compounds (collectively referred to as Total Petroleum Hydrocarbons, or “TPH”), all of which are known carcinogens. Discharge of the toxic pollutants, as identified in 40 C.F.R. § 401.15, likely includes, but is not limited to, benzene, toluene, naphthalene, polynuclear aromatic hydrocarbons (including, but not limited to, phenanthrene, benzantracenes, benzophyrenes, benzofloranthene, chrysenes, dibenzanthracenes, and idenopyrenes), fluoranthene, arsenic, cadmium, copper, mercury, and nickel, all of which are hazardous to the health of humans and marine life. Upon information and belief, BP has analyzed and knows the exact concentrations of each of the toxic pollutants present in the oil coming from its wells.

458. Moreover, the chemical dispersants used by BP during the Spill response may be harmful to the health of humans and marine life. Over two million gallons of chemical dispersants were released into Gulf waters to disperse the oil coming from the damaged well. According to environmental experts in the Deepwater Horizon Study Group, oil recovery (such as skimming) is preferable to chemical dispersion because recovery actually removes the oil from the environment, rather than simply spreading it through the water column and sinking it to the sea floor, where it can continue to cause environmental damage to the Gulf ecosystem while

no longer causing public relations damage to BP. The environmental effects of using chemical dispersants in such magnitude and at such depths have never been tested.

459. The Spill has impacted and continues to impact Plaintiffs and the shorelines, beaches, shores, marshes, harbors, estuaries, bayous, bays, and waters of the Coastal Zone.

460. The Spill and the resulting contamination of the Coastal Zone have caused and will continue to cause a loss of revenue for individuals and entities that rely on the use of the Gulf of Mexico and/or its marine life.

461. There are a wide variety of commercially valuable fish species in the Gulf of Mexico that have been and will continue to be harmed by the Spill, including, but not limited to, shrimp, crabs, oysters, menhaden,<sup>13</sup> and pelagic fish.

462. The Spill caused the National Oceanographic and Atmospheric Administration (“NOAA”) to restrict commercial and recreational fishing across large areas of the Gulf of Mexico – up to 88,552 square miles at the restriction’s greatest extent – causing damage to the livelihoods of many of Plaintiffs’ citizens. Fishing of certain species and in certain areas of the Gulf is currently still restricted until further notice from NOAA.

463. According to the National Marine Fisheries Service, commercial fishermen harvested 1.4 billion pounds of fish from the Gulf of Mexico in 2009, resulting in \$614.5 million in total landings revenue for the region.

464. Major shrimp species in the Gulf of Mexico, including, but not limited to, white, pink, Red Royal, and brown shrimp, are mainly located in coastal areas. During the Spill, the

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<sup>13</sup> Menhaden are small, oily-fleshed fish that play a major role in the marine ecosystem on the East Coast of the United States, serving as an invaluable prey species for many predatory fish, such as striped bass, bluefish, mackerel, flounder, tuna, and sharks. Menhaden are also a very important food source for many Gulf Coast birds, including egrets, ospreys, seagulls, northern gannets, pelicans, and herons.

Gulf's various shrimp species were harmed due to mortality of adults, as well as that of postlarval shrimp, whose migrations out of the inlets, shallows, and estuaries where they were born coincided precisely with the timing of the Spill, devastating current as well as future shrimp catches.

465. In 2009, Gulf of Mexico shrimp landings were the nation's largest at 241 million pounds, which was 80 percent of the national total and worth \$313.8 million, according to NOAA sources. Louisiana led all Gulf states with nearly 109.8 million pounds, worth \$89.2 million; followed by Texas, almost 89.7 million pounds, worth \$72.9 million; Alabama, almost 21.7 million pounds, worth \$17.6 million; Mississippi, 10.1 million pounds, worth \$8.2 million; and Florida's Gulf Coast, 9.7 million pounds, worth \$7.8 million.

466. According to NOAA, the Gulf region also leads the nation in the production of oysters in 2009, harvesting 22.1 million pounds of meats, a catch worth almost \$85 million and making up over 62 percent of the nation's total.

467. Several valuable crab species live in the Gulf of Mexico, including, but not limited to, blue crab, Gulf stone crab, and stone crab. As with shrimp, crab spawning and larval seasons coincided disastrously with the Spill, putting future harvests at risk for years to come.

468. In 2009, the Gulf region harvested almost 40% of the nation's blue crab catch: 59.1 million pounds of hard blue crab landings worth \$57.3 million, according to the National Marine Fisheries Service. Louisiana alone landed approximately 33 percent of the total national blue crab catch: 50.78 million pounds, a catch worth \$49.17 million.

469. According to NOAA, surface-oriented marine life was most harmed by the early stages of the Spill, especially near-shore species and/or species that were spawning when the oil reached the shore. But as the crude oil weathered, sank, or was dispersed throughout the water

column, reef- and bottom-oriented fish (such as snappers and groupers) were also threatened. In November and December 2010, scientists found evidence that thick swaths of sunken oil bearing the unique hydrocarbon signature of the Macondo well are covering large areas of the seafloor in the Gulf, killing seep water coral reefs and sediment-dwelling organisms that play major roles at the base of the Gulf food chain.

470. Moreover, as sunken and dispersed oil resurfaces, additional harm to marine ecosystems will occur and continue. As noted by Dr. Lisa Kaplowitz of the U.S. Department of Health and Human services, in her June 15, 2010 testimony before Congress: “Oil can remain toxic in the environment for years.”

471. The Spill has also harmed marine species at the top of the Gulf food chain, such as the Atlantic Bluefin tuna. The Gulf of Mexico is one of only two major spawning grounds for this endangered tuna species; each year from March to June the fish converge there between latitudes 25-28°N to breed. Not only did the Spill’s timing coincide precisely with the peak of the Bluefin’s Gulf of Mexico spawning season, but NOAA maps show that the Spill and its underwater plumes of oil and dispersants spread across latitudes 25-28°N, directly polluting the tuna’s limited spawning area.

472. During the spawning season, Bluefin tuna release their eggs near the surface of the water, meaning oil and dispersants from the Spill likely coated and destroyed millions of tuna eggs. Oil skimming activities could also have physically damaged the eggs, or broken surface water tension, allowing the eggs to sink too deep to properly develop.

473. The effects of the Spill will continue to threaten the Bluefin species for years to come. Bluefin tuna are large, slow-growing fish that take ten years to reach sexual maturity. The destruction of, or severe damage to, an entire generation of fish in 2010 will therefore

continue to affect the tuna population for at least a decade; if next year's spawning season is also affected by resurfacing oil or the remaining underwater plumes, the damage to the species will be catastrophic. Already severely overfished, the Atlantic Bluefin tuna may not survive this massive disruption to an entire spawning season, let alone the potentially long-term devastation of one of its annual spawning sites.

474. In addition, as part of its offshore containment response program, BP directed the use of vessels to recover oil coming to the surface of the Gulf of Mexico; the use of vessels to skim oil from the surface of the water; the use of vessels to conduct in situ burning of that reached the surface of the water; and the use of Vessels of Opportunity ("VoO").

475. The VoO program is touted by BP as a key component to BP's response to the disaster. BP used at least 2,000 commercial and charter fishing vessels and other boats from communities along the shoreline to tow and deploy booms — floating barriers intended to contain, deflect, or hold back oil floating on the water's surface. Other VoO vessels worked with absorbent booms used to soak up some of the millions of gallons of oil coming to the surface of the Gulf. Still other VoOs supported in situ burning efforts. Some VoOs conducted skimming operations to skim oil off the surface. Other VoOs recover light oil and tar balls.

476. Vessel owners who participated in the VoO program entered into Master Vessel Charter Agreements (the "Charter Agreements") under which Defendant BP chartered their vessels pursuant to the VoO program.

477. Pursuant to the Charter Agreements, BP agreed that the General Maritime Laws of the United States should govern "all matters of construction, validity and performance" of the Charter Agreements, and that only in the event that the general maritime laws of the United States do not apply, the laws of the State of Louisiana shall govern.

478. The Charter Agreements were subsequently amended by letter agreement, stipulation and/or court order, and the amendments apply retroactively to the date of the initial signing of the Charter Agreements.

479. In addition, Defendant BP made various statements and representations in the press, in court proceedings, on BP's website, and/or otherwise, in which BP recognized and/or voluntarily assumed responsibility for the safety and protection of workers engaged in the VoO program.

480. Defendant BP is subject to a court order that prevents it from attempting to enforce any releases contained in Charter Agreements and/or other documents engaging those participating in the VoO program.

481. The Charter Agreements provided that the charter terms continued until the vessels were detoxified and the boats received off charter dispatch notifications. Many vessels were laid off in August and September of 2010 and were detoxified, but the owners were told that they were not released from the charters until they received off charter dispatch notifications.

482. In most cases, off charter dispatch notifications were not received until November 26, 2010. The owners of these vessels did not return to fishing because they understood that they were still under charter until they received the off charter dispatch notification. Some VoO vessel owners did not receive off charter dispatch notifications until December, 2010 or January, 2011.

483. Despite its detention of the VoO vessels through November 26, 2010 and beyond, BP has refused to pay these vessel owners for the period between the initial detoxification and the off charter notification during which they were unable to return to their livelihoods.

484. The VoO vessels sustained substantial physical damage as the result of their participation in the program. The oil remediation efforts required of the vessels participating in the VoO program required the vessels to navigate through oil contaminated waters, staining propellers, rudders, and engines.

485. Initially, BP instructed the VoO vessel owners that their vessels would regularly undergo detoxification when they returned to shore on standby. However, although large commercial vessels regularly underwent decontamination, VoO vessels did not. As a result, large quantities of oil and other toxins accumulated on and in the VoO vessels.

486. When decontamination and detoxification was finally performed on the VoO vessels, the procedure was often performed inadequately, without full environmental protection, causing damage to the VoO vessels, their hulls, decks, equipment and/or other appurtenances.

487. Because the vessels remained covered in oil and chemicals for weeks and, in some cases, months before detoxification, oil hardened like a varnish on hulls and decks of the vessels so that when detoxification was finally performed, the removal of the contaminants would cause paint to peel from the hulls, decks, equipment and appurtenances of the vessels.

488. In addition, BP installed its oil containment equipment for oil remediation on the back of VoO vessels and, when that equipment was removed, the decks were often damaged with holes and dents. BP has failed to compensate the VoO vessel owners for this damage.

489. BP has failed to pay VoO vessel owners for the period during which their vessels were inoperable due to vessel damage to oil containment operations, inadequate detoxification, and/or damage due to removal of BP equipment.

490. Plaintiffs also suffered severe economic hardship as a result of the drilling moratorium issued after the Spill. Many of Plaintiffs' citizens include deepwater drilling rig

workers, rig support personnel, transport personnel and indirect support workers such as restaurant employees and fueling personnel. They have suffered losses and damages as the result of the Six-Month Deepwater Drilling Moratorium issued by the United States Department of Interior on May 28, 2010, in response to the Spill, resulting in a loss of revenue for Plaintiffs.

491. On May 28, 2010, the United States Department of the Interior Minerals Management Service, as a direct, proximate and foreseeable result of the Deepwater Horizon / Macondo Well blow-out and spill, issued a six-month moratorium on all new and existing deepwater drilling in the Gulf of Mexico, effectively shutting down oil and gas industry operations along the Gulf Coast.

492. The Moratorium Notice to Lessees and Operators (NTL No. 2010-N04) states, "under current conditions, deepwater drilling poses an unacceptable threat of serious and irreparable harm or damage to wildlife and the marine, coastal and human environment." The policy halted approval of any new permits for deepwater drilling and suspended production in the Gulf, affecting 33 offshore oil rigs operated by various oil companies. With 88% of U.S. offshore rigs located on Louisiana's Outer Continental Shelf ("OCS"), Louisiana businesses and coastal communities felt the majority of the moratorium's impact.

493. Following its directive to implement the Deepwater Moratorium, the Obama administration issued a second notice to lessees and operators of federal oil and gas leases (NTL No. 2010-N05) on June 8, 2010, calling for increased safety measures for energy development on the OCS. The recommendations therein applied to all activities on the OCS, including deepwater drilling activity suspended under NTL No. 2010-N04.

494. On June 22, 2010, the United States District for the Eastern District of Louisiana granted a preliminary injunction, lifting the drilling moratorium.



495. The U.S. Department of the Interior's appeal was denied, and in response the agency issued new suspensions on July 12, 2010. This new document is very similar to its predecessor, the first deepwater drilling moratorium, with more substantial rationale for the ban and a focus on technologies used in drilling rather than water depth stating "the new suspensions apply to drilling operations that use subsea blowout preventers (BOP) or BOPs on floating facilities." The new version also allowed for the possibility of the moratorium being lifted before November 30, 2010.

496. On October 12, 2010, the U.S. Department of Interior's Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE") announced that the federal government would lift the drilling moratorium. The October announcement indicated an early end to the moratorium, which had been scheduled to run through the month of November 2010.

497. Although the moratorium was officially lifted on October 12, drilling did not resume quickly because of the need for more inspections and compliance with new regulations.

498. On January 3, 2011, BOEMRE notified 13 oil companies that they could resume previously approved exploration and production activities without submitting revised plans.

499. The economic impacts of the moratorium are diverse and far-reaching, affecting individuals and businesses in various industries across the Gulf Coast. These impacts were direct (e.g., drilling rig workers) and indirect (e.g., drilling equipment suppliers and restaurants).

500. On January 13, 2011, the Greater New Orleans Inc. Regional Economic Alliance issued a report about the economic repercussions of the deepwater drilling moratorium.

501. The report found that the moratorium shut down 33 deepwater rigs, affecting more than 13,000 workers. It further found that, although the moratorium ended in October 2010, only two deepwater permits had been issued since then, compared with 5.8 per month

issued before the Deepwater Horizon oil spill.

502. The report further found that deepwater drilling contributes about \$2.3 million to \$3.2 million in direct tax revenue to the State of Louisiana and parish governments each month and more than \$7 million in indirect monthly revenue to state and local governments.

503. The report concluded that if the rate of issuance of drilling permits remains unchanged, unemployment will likely dramatically increase as businesses continue to diminish their savings. This would be a huge blow to the State of Louisiana and coastal parishes - still recovering from the hurricanes of 2005 and 2008. Additionally, rigs and entire drilling operations may move to other areas or even overseas, taking with them valuable jobs and tax revenue. The report observed that many small, family-owned businesses which support the oil and gas industries are vulnerable. The report claimed that without increased business in the form of drilling activity these companies may not survive.

504. The Spill has not only had a severe impact on fisheries in the Gulf of Mexico, but it has also dealt a devastating blow to tourism in the Coastal Zone and the individuals and entities that ordinarily rely on tourism for their livelihood. Tourism accounts for about 46 percent of the Gulf Coast economy annually. The Spill will result in at least \$7.6 billion in lost tourism revenue in 2010, according to a study done for the U.S. Travel Association.

505. The Spill may become the worst disaster in the history of Florida tourism. Some analysts have preliminarily estimated that the impact on tourism along Florida's Paradise Coast could reach \$3 billion.

506. During the Spill, the Mississippi coast had a 50 percent cancellation rate on reservations generally.

507. Twenty-six percent of Americans who had planned to visit Louisiana stated they

were no longer planning to visit after the Spill, according to a nationwide survey taken by the Louisiana Tourism Commission in May 2010. Prior to the Spill, Louisiana hosted 24.1 million visitors per year, whose purchases fueled a \$9.4 billion tourism industry and sustained more than 200,000 direct and indirect jobs for Gulf residents, according to the Louisiana Tourism Commission.

508. Alabama has also seen a dramatic drop in tourism, including a 60 percent drop in visitations and an 80 percent drop in home rentals. Overall, the combination of tourism and fishing losses in Alabama in 2010 will probably yield adverse impacts of \$1.7 billion in economic output, \$498.9 million in earnings, and 24,880 jobs, according to a report by the Center for Business and Economic Research at the University of Alabama.

509. The Spill and the Spill response have also caused damage to real property owned and/or leased by Plaintiffs in the Coastal Zone, resulting in physical damage and diminution of property values. Not only have oil and other contaminants polluted real and private properties throughout the Coastal Zone, but pieces of the destroyed Deepwater Horizon vessel have come ashore in some places, damaging real and private property. The Spill response has also resulted in intrusion on and damage to property, including the annoyance, disruption and physical damage caused by vehicles, heavy machinery, boom, staging areas, and other materials and activities on or near Plaintiffs' properties.

510. The Spill has also damaged submerged oyster beds that are the leased property of some citizens. The contamination of these submerged oyster beds has interfered with their ability to use their leased property as intended, damaging their livelihoods as well as the value of their leased oyster bed properties.

511. Because of the size and nature of the surface oil slick, the subsurface oil plumes,

and weathered oil on shorelines, and the toxic effects of the oil and other substances released during the Spill on humans, marine life, and the Coastal Zone environment, there have been and will continue to be further economic losses and diminution of property values to individuals and entities owning and/or leasing residential or investment properties in the Coastal Zone.

512. The foregoing losses in the private sector have caused severe damage to Plaintiffs in the form of lost income and tax revenues. Plaintiffs have also lost royalties, rents, fees and net profit shares as a result of the Spill.

513. Some Plaintiffs own or lease real property, and have suffered the loss, destruction, and/or diminution in value of their property as a result of the Spill.

514. The Spill also required dramatic increases in expenditures for public services, including additional administrative costs, costs of additional personnel, and out-of-pocket costs incurred for material and equipment.

515. Plaintiffs also incurred the costs of response, removal, clean-up, restoration and/or remediation after the Spill. These costs include increased personnel salary costs, overtime travel and per diem expenses; costs for use of government-owned equipment and facilities, and actual expenses for goods and/or services supplied by contractors and/or vendors.

516. Because investigations are ongoing, there are many other potential effects from the Spill that have not yet become known, and Plaintiffs reserve the right to amend this Voluntary Master Complaint Cross-Claim and Third-Party Complaint for Local Governmental Entities, after additional information becomes available.

### **CLASS ACTION ALLEGATIONS**

517. Plaintiffs seek certification of the following class (“the Class”):

All local government entities that claim losses due to damage, destruction, or diminution in value of property; loss of tax revenue, income and/or use; costs of response, removal, clean-up, restoration and/or remediation, including costs of

increased public services; civil and/or criminal penalties; and/or other damages, losses, and/or costs as a result of the April 20, 2010 explosions and fire aboard, and sinking of, the Deepwater Horizon, and the resulting Spill.

518. Plaintiffs may also seek certification, to the extent necessary or appropriate, of the following state-wide subclasses (the “Subclasses”) of local government entities in the states of Alabama, Florida, Louisiana, Mississippi, and Texas, pursuant to the laws of their respective states.

The Alabama Subclass:

All local government entities in Alabama that claim losses due to damage, destruction, or diminution in value of property; loss of tax revenue, income and/or use; costs of response, removal, clean-up, restoration and/or remediation, including costs of increased public services; civil penalties; and/or other damages, losses, and/or costs as a result of the April 20, 2010 explosions and fire aboard, and sinking of, the Deepwater Horizon, and the resulting Spill.

The Florida Subclass:

All local government entities in Florida that claim losses due to damage, destruction, or diminution in value of property; loss of tax revenue, income and/or use; costs of response, removal, clean-up, restoration and/or remediation, including costs of increased public services; civil penalties; and/or other damages, losses, and/or costs as a result of the April 20, 2010 explosions and fire aboard, and sinking of, the Deepwater Horizon, and the resulting Spill.

The Louisiana Subclass:

All local government entities in Louisiana that claim losses due to damage, destruction, or diminution in value of property; loss of tax revenue, income and/or use; costs of response, removal, clean-up, restoration and/or remediation, including costs of increased public services; civil and/or criminal penalties; and/or other damages, losses, and/or costs as a result of the April 20, 2010 explosions and fire aboard, and sinking of, the Deepwater Horizon, and the resulting Spill.

The Mississippi Subclass:

All local government entities in Mississippi that claim losses due to damage, destruction, or diminution in value of property; loss of tax revenue, income and/or use; costs of response, removal, clean-up, restoration and/or remediation, including costs of increased public services; civil penalties; and/or other damages, losses, and/or costs as a result of the April 20, 2010 explosions and fire aboard, and sinking of, the Deepwater Horizon, and the resulting Spill.

The Texas Subclass:

All local government entities in Texas that claim losses due to damage, destruction, or diminution in value of property; loss of tax revenue, income and/or use; costs of response, removal, clean-up, restoration and/or remediation, including costs of increased public services; civil penalties; and/or other damages, losses, and/or costs as a result of the April 20, 2010 explosions and fire aboard, and sinking of, the Deepwater Horizon, and the resulting Spill.

519. This action is brought and may properly be maintained as a class action on behalf of the proposed Class and/or Subclasses as described above, and such other additional classes or subclasses as Plaintiffs may propose and/or the Court may designate, pursuant to the applicable and appropriate provisions of Rule 23(a)(1)-(4), (b)(3), (b)(1), (c)(4) and/or (c)(5).

**A. Numerosity of the Class and/or Subclasses — F.R.C.P. 23(a)(1)**

520. The Class and/or Subclasses consist of tens of thousands of individuals and businesses who have been economically damaged by the spill, making joinder impracticable. Class and/or Subclass members can be informed of the pendency of this action by print, internet, and broadcast notice.

**B. Commonality — F.R.C.P. 23(a)(2).**

521. Common questions of law and fact exist as to all members of the Class and/or Subclasses. Because Defendants' behavior here is governed by federal regulations, federal maritime law, and federal legislation like the Oil Pollution Act and the Clean Water Act, the Class and/or Subclass members will be subject to common questions of law.

522. Furthermore, the factual bases of Defendants' outrageous conduct are common to all Class and/or Subclass members and represent a common thread of reckless conduct and decisions, gross negligence and willful, wanton, and reckless indifference for the rights of others, resulting in injury to all members of the Class and/or Subclasses. Each Class and/or Subclass member's claim arises from the same course of planning, decisions, and events, and each Class

and/or Subclass member will make similar legal and factual arguments to prove Defendants' outrageous, willful, reckless, wanton, and deplorable conduct and liability.

523. Defendants' conduct presents common factual questions, including:

- (a) Whether Defendants negligently, outrageously, willfully, wantonly, and/or recklessly caused and/or contributed to the blowout, explosions, fire, and the resulting Spill;
- (b) Whether Defendants knew or should have known of the risk of a blowout and/or major failure of the vessel such as those which caused the blowout, explosions, fire, and Spill;
- (c) Whether Defendants' conduct in failing to utilize all available deepwater drilling best practices and drilling vessel safety mechanisms to prevent the Spill was outrageous, grossly negligent, willful, wanton, or reckless, or behavior even more deplorable;
- (d) Whether Defendants acted outrageously or with willful, wanton, and reckless indifference to the risk of a major failure of the drilling vessel, its pipes, valves, and other machinery and materials.
- (e) The degree of each Defendant's reprehensibility under the Supreme Court guidelines articulated in, for example, *BMW of North America, Inc. v. Gore*, 517 U.S. 559 (1996) and *State Farm Mut. Auto. Ins. Co. v. Campbell*, 538 U.S. 408 (2003).

524. Common questions of fact also exist with respect to the punitive damages liability of Defendants to the Class and/or Subclasses, including Defendants' outrageous, grossly negligent, willful, reckless, and wanton conduct; the calculation of the amount of punitive

damages that may be imposed upon each of the Defendants consistent with due process; intra-class equity with respect to the allocation and utilization of punitive damages; and the most practicable and most equitable allocation, disbursement, and utilization of such damages for punishment of Defendants' wrongful conduct toward Plaintiffs, the Class and/or Subclasses, and society, and in fulfillment of the deterrent policy and purpose of punitive damages.

**C. Typicality — F.R.C.P. 23(a)(3)**

525. The claims in this Master Complaint are typical of the claims of the Class and/or Subclasses in that they represent the various types of non-governmental economic losses and property damage caused by the Spill. Each Class and/or Subclass member's claim arises from the same course of planning, decisions, and events, and each Class and/or Subclass member will make similar legal and factual arguments to prove Defendants' outrageous, grossly negligent, willful, reckless, and wanton conduct and liability.

**D. Adequacy of Representation — F.R.C.P. 23(a)(4)**

526. Plaintiffs will fairly and adequately represent and protect the interests of the Class and/or Subclasses. Plaintiffs have retained counsel with substantial experience in prosecuting environmental, mass tort, and complex class actions, including actions involving environmental contamination and, specifically, catastrophic oil spills. Among the undersigned counsel for Plaintiffs are counsel who represent claimants from each of the affected Gulf states and claimants with each type of claim (fishery-related, property-related, and business-related), and counsel with experience in complex class action litigation and trials, including the Exxon Valdez litigation, and counsel with particular expertise on punitive damages issues. Plaintiffs and their counsel are committed to prosecuting this action vigorously on behalf of the Class and/or Subclasses and have the financial resources to do so. Neither Plaintiffs nor their counsel have interests adverse to those of the Class and/or Subclasses.



**E. Class Certification under F.R.C.P. 23(b)(3) — Predominance and Superiority**

527. Common issues of fact and law predominate concerning the claims of the Class and/or Subclasses.

528. Defendants' conduct presents predominant common factual questions. Fundamentally, all Plaintiffs' claims arise out of a single course of conduct by Defendants that caused the Macondo well blowout, the Deepwater Horizon explosions, and the subsequent Spill. Although this is a single-event, single-location mass disaster that has affected, and will continue to affect a large geographic area and many individuals and businesses, for a long time to come — its wide-ranging effects can be traced back to one single root: a chain of decisions and actions made jointly, severally, and solidarily by the small group of Defendants named here. Plaintiffs will present common proof with respect to Defendants' failure to use deepwater drilling best practices or take adequate safety precautions in the operation and maintenance of the Macondo well and the Deepwater Horizon — proof that is the same for each member of the Class and/or Subclasses. Plaintiffs' proof of Defendants' outrageous, grossly negligent, willful, reckless, and wanton conduct will involve the same cast of characters, events, discovery, documents, fact witnesses, and experts. Common questions of fact also predominate concerning the determination of the aggregate quantum of punitive damages, necessary to fulfill the punishment and deterrence goals of such damages.

529. Because Defendants' behavior here is governed by federal regulations, federal maritime law, and federal legislation like the Oil Pollution Act and the Clean Water Act, the Class and/or Subclass members will be subject to common questions of law.

530. A class action is superior to the only other method available for the adjudication of Defendants' outrageous, grossly negligent, willful, reckless, and wanton conduct — individual litigation and multiple trials. The repetitive individual litigation of Defendants' conduct by all

members of the Class and/or Subclasses is inefficient, impracticable, economically infeasible, and potentially unfair, particularly in light of the unique context of Defendants' course of conduct and its unprecedented impact upon the Class and/or Subclasses, the American environment, economy, and society.

531. It would be unduly burdensome on the courts to undergo the individual re-litigation of the same facts and legal issues in thousands of cases. The consideration of common questions of fact and law via this class action will conserve judicial resources and promote a fair and consistent resolution of these claims.

**F. Class Certification under F.R.C.P. 23(b)(1)**

532. Individual litigation of Plaintiffs' claims would present a risk of inconsistent or varying adjudications that would establish incompatible standards of conduct for Defendants, as well as the risk that adjudications for some individual class members could impair the ability for other class members to protect their own interests, thereby making class certification of this action appropriate under Rule 23(b)(1)(A) and (B).

533. Individual litigation could spawn inconsistent or contradictory judgments on issues of Defendants' knowledge, intent, recklessness, conduct, and duty — concepts that should not vary, as of any particular point in time, from Class member to Class member. Individual litigation would also increase the delay and expense to all parties and the court system and could undermine public confidence and trust in that system.

534. In the particular context of punitive damages, piecemeal adjudications of punitive damages on economic loss and property damage claims on an individual, local, or statewide basis do not and cannot hold Defendants legally accountable for the total scope of their uniquely multi-state, region-wide course of conduct (which has impacted more individuals, groups, and categories of claims and claimants, on a more sustained basis, than any other course of tortious

conduct).

535. Plaintiffs here seek class-wide adjudication as to the issue of punitive damages, with respect to the total amount Defendants may be constitutionally or equitably required to pay into a nationwide punishment fund (the “limits of punishment”), and the appropriate allocation and distribution of such damages to any member of the Class and/or Subclasses for their benefit, and that of society. The prosecution of separate actions by individual members of the Class and/or Subclasses on such claims and issues would create an immediate risk of inconsistent or varying adjudications. These varying adjudications would be prejudicial to members of the Class, Subclasses, and Defendants, would frustrate the purposes and policies of punitive damages by fostering sub-optimal punishment and deterrence, and would establish incompatible standards of conduct for Defendants.

536. Piecemeal adjudications will frustrate the efforts of this or any court to determine and enforce the constitutional limits of aggregate punishment for this course of misconduct, thereby (a) forcing victims to compete in a race for judgments in order to claim against a diminishing res, resulting in recoveries for some victims and worthless judgments for the rest; (b) ignoring what the Supreme Court has termed the substantive limit that due process places on the amount of punitive damages that may be awarded; and (c) thereby creating inequitable disparities among members of the Class and/or Subclasses.

537. Moreover, individual awards of punitive damages in the context of mass misconduct would frustrate the broader societal interest in not only punishing Defendants for their misconduct, but in directing an appropriate share of any award toward the greatest possible public benefit, e.g., without limitation, scientific research, environmental remediation programs, clean energy programs, programs geared toward sustaining and retraining those whose

livelihoods were destroyed by the spill, improving the economic situation for those communities whose economies were based on tourism in the Gulf of Mexico, and amelioration and mitigation of spill-related diseases and damages.

538. Finally, piecemeal adjudications may under-deter Defendants' misconduct by failing to account for the full scope or total social costs, thereby frustrating the purpose of punitive damages – the vindication of society's interests in deterrence and punishment that is fully and fairly proportionate to the scope and nature of the misconduct and its harm to society as a whole.

539. By contrast, class treatment, as requested in this Master Complaint, will allow one single adjudication of the single course of Defendants' conduct that is the underlying cause of all the injuries suffered by Plaintiffs. Class treatment presents far fewer management difficulties than repetitive individual litigation, and provides the benefits of economies of scale, exercise of equity jurisdiction, and comprehensive supervision by a single court, in order to achieve justice and proportionality, avoid underdeterrence, and determine the proper roles of the "limits of punishment" theory raised by the common questions of punitive damages under the unique circumstances of this case, without offending the due process constraints articulated by the Supreme Court. Class treatment best ensures that Defendants pay for the economic and environmental costs of their misconduct and that there is a fair distribution of compensatory and punitive damages among Class and/or Subclass members for their benefit, for the benefit of their beneficiaries, and for the benefit of society and the environment.

**G. Class Certification under F.R.C.P. 23(b)(2)**

540. Defendants have acted or refused to act, and continue to act and refuse to act, on grounds that apply generally to the Class and/or Subclasses, so that final injunctive relieve and/or corresponding declaratory relief is appropriate respecting the Class and/or each of the Subclasses

as a whole.

**H. Class Certification of Particular Issues under F.R.C.P. 23(c)(4) and Subclasses under 23(c)(5)**

541. Certification of the Class and/or Subclasses with respect to common factual and legal issues concerning Defendants' outrageous, grossly negligent, willful, wanton, and reckless conduct and the resulting necessary and appropriate quantum of punitive damages, or ratio of punitive damages to actual harm, is appropriate under Rule 23(c)(4).

**CLAIMS FOR RELIEF**

**I. Claims Under General Maritime Law**

**A. Negligence**

**All Plaintiffs v. All Defendants**

542. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

543. At all times material hereto, Drilling Defendants were participating in drilling operations onboard the Deepwater Horizon in the Gulf of Mexico.

544. At all times material hereto, Drilling Defendants owed and breached duties of ordinary and reasonable care to Plaintiffs in connection with the drilling operations of the Deepwater Horizon and the maintenance of the vessel, its appurtenances and equipment, and additionally owed and breached duties to Plaintiffs to guard against and/or prevent the risk of an oil spill.

545. In addition, Cameron and Weatherford as designers, manufacturers, and suppliers of the Deepwater Horizon's BOP and float collar, respectively, owed and breached duties of ordinary and reasonable care to Plaintiffs in connection with the design, manufacture and supply of the BOP and float collar.

546. Anadarko, Anadarko E&P, and MOEX had access to Halliburton/Sperry Sun INSITE real time feed data that was transmitted from the Deepwater Horizon on April 20, 2010. As such, they knew or should have known of the presence of hydrocarbons in the well on the evening of April 20, 2010, and they owed a duty to Plaintiffs to warn of the impending disaster in sufficient time to avert it. Anadarko, Anadarko E&P, and MOEX breached their duties to Plaintiffs by failing to warn the drilling vessel crew of the imminent blowout so that they could take evasive action.

547. The existence and breach of these legal duties are established under the general maritime law and the law of Florida, Alabama, Mississippi, Louisiana, and Texas as applicable herein.

548. Plaintiffs, as local government entities and property owners at or near the coast of the Gulf of Mexico that are dependent upon the Gulf of Mexico's marine and coastal environments for, *inter alia*, tax revenue, royalties, rents, and fees were within an appreciable zone of risk and, as such, were obligated to protect them.

549. The blowout and explosions on the Deepwater Horizon, its sinking and the resulting Spill were caused by the joint and concurrent negligence of Defendants which renders them jointly, severally, and solidarily liable to Plaintiffs.

550. Defendants knew of the dangers associated with deep water drilling and failed to take appropriate measures to prevent damage to Plaintiffs and the Gulf of Mexico's marine and coastal environments and estuarine areas.

551. Defendants were under a duty to exercise reasonable care while participating in drilling operations on the Deepwater Horizon to ensure that a blowout and subsequent oil spill did not occur as a result of such operations.

552. Defendants were under a duty to exercise reasonable care to ensure that if crude oil discharged in the event of a blowout, that it would be contained and/or stopped within the immediate vicinity of the Deepwater Horizon in an expeditious manner.

553. Defendants knew or should have known that the acts and omissions described herein could result in damage to Plaintiffs.

554. Defendants, respectively and collectively, failed to exercise reasonable care while participating in drilling operations to ensure that a blowout and subsequent oil spill did not occur, and thereby breached duties owed to Plaintiffs.

555. Defendants, respectively and collectively, failed to exercise reasonable care to ensure that oil would expeditiously and adequately be contained within the immediate vicinity of the Deepwater Horizon in the event of a blowout, and thereby breached duties owed to Plaintiffs.

556. Defendants, respectively and collectively, failed to exercise reasonable care to ensure that adequate safeguards, protocols, procedures and resources would be readily available to prevent and/or mitigate the effects an uncontrolled oil spill into the waters of the Gulf of Mexico, and thereby breached duties owed to Plaintiffs.

557. The conduct of the Defendants with regard to the manufacture, maintenance and/or operation of drilling operations and oil rigs such as the Deepwater Horizon and its appurtenances and equipment is governed by numerous state and federal laws and permits issued under the authority of these laws. These laws and permits create statutory standards that are intended to protect and benefit Plaintiffs. One or more of the Drilling Defendants violated these statutory standards.

558. The violations of these statutory standards constitute negligence per se under Louisiana, Texas, Mississippi, Alabama, Florida, and the general maritime law.

559. At all times material hereto the Deepwater Horizon was owned, navigated, manned, possessed, managed, and controlled by Transocean.

560. As the owner and manager of the Deepwater Horizon, Transocean owed duties of care to Plaintiffs to, *inter alia*, man, possess, manage, control, navigate, maintain and operate the Deepwater Horizon with reasonable and ordinary care.

561. Transocean breached its duties to Plaintiffs by, *inter alia*, failing to properly manage, control, maintain and operate the Deepwater Horizon and its safety equipment, including the gas sensors, air intake valves, emergency shut down systems, and BOP, and in disabling vital alarm systems on the Deepwater Horizon before the blowout.

562. Transocean also breached its duties to Plaintiffs by making and/or acquiescing to a series of reckless decisions concerning, *inter alia*, well design, the use of centralizers, mudding operations, cementing, integrity testing, deployment of the casing hanger lockdown sleeve, spacer material, and simultaneous operations causing worker confusion and loss of focus.

563. Defendants also violated the International Safety and Management Code (“ISM”), as adopted by the International Convention for the Safety at Life at Sea (“SOLAS”), which provides rules and standards to ensure that ships are constructed, equipped, and manned to safeguard life at sea, by failing to properly maintain the vessel, train personnel, and perform appropriate risk assessment analyses. *See* 46 USC §§ 3201-3205 and 33 CFR §§ 96.230 and 96.250.

564. At all times material hereto, the Deepwater Horizon was leased and operated pursuant to a contract between Transocean and BP. Together, Transocean and BP and other Drilling Defendants were responsible for design and well control.

565. BP owed duties to Plaintiffs to, *inter alia*, exercise reasonable care to design,



create, manage and control the well and the flow of hydrocarbons therefrom in a safe and prudent manner and to conduct its drilling operations with reasonable and ordinary care.

566. BP breached its duties to Plaintiffs by, *inter alia*:

- (a) choosing and implementing a less expensive and less time-consuming long string well design, which had few barriers against a gas blowout, instead of a safer liner/tieback design which would have provided additional barriers to gas blowout, despite its knowledge that the liner/tieback design was a safer option;
- (b) using pipe material that it knew, and which it recognized before the blowout, might collapse under high pressure;
- (c) using too few centralizers to ensure that the casing was centered into the wellbore;
- (d) failing to implement a full “bottoms-up” circulation of mud between the running of the casing and the beginning of the cement job in violation of industry standards;
- (e) failing to require comprehensive lab testing to ensure the density of the cement, and failing to heed the ominous results of negative pressure testing which indicated that the cement job was defective;
- (f) cancelling the cement bond log test that would have determined the integrity of the cement job;
- (g) failing to deploy the casing hanger lockdown sleeve to prevent the wellhead seal from being blown out by pressure from below;
- (h) using an abnormally large quantity of mixed and untested spacer fluid;

- (i) failing to train drilling vessel workers and/or onshore employees, and to hire personnel qualified in risk assessment and management of complex systems like that found on the Deepwater Horizon; and,
- (j) requiring simultaneous operations in an effort to expedite the project, making it difficult for workers to track fluid volumes in the wellbore.

567. All of the foregoing acts and/or omissions by BP proximately caused and/or contributed to Plaintiffs' injuries and damages.

568. At all times material hereto, Halliburton was responsible for cementing the well that was the subject of the Spill, and further was engaged in testing, analysis, and monitoring of the aforementioned well.

569. At all times material hereto, Halliburton owed duties to Plaintiffs to, *inter alia*, exercise reasonable care in conducting its cementing, testing, analysis and monitoring of the Deepwater Horizon's well.

570. Halliburton breached its duties to Plaintiffs by, *inter alia*, failing to exercise reasonable care in conducting its cementing, testing, analysis, and monitoring of the Deepwater Horizon's well. Halliburton was negligent by, *inter alia*, failing to use a full "bottoms-up" circulation of mud between the running of the casing and the beginning of the cement job in violation of industry standards; failing to require comprehensive lab testing to ensure the density of the cement, and failing to heed the ominous results of negative pressure testing which indicated that the cement job was defective; cancelling, or acquiescing in the cancellation of, the cement bond log test that would have determined the integrity of the cement job; failing to deploy, or acquiescing in the decision not to deploy, the casing hanger lockdown sleeve to prevent the wellhead seal from being blown out by pressure from below, all of which

proximately caused and/or contributed to Plaintiffs' injuries and damages.

571. At all times material hereto, M-I was providing the drilling fluids or "mud" for the drilling operations onboard the Deepwater Horizon and was responsible for mud drilling, composition and monitoring, and for the provision of "spacer" solution.

572. At all times material hereto, M-I owed duties of care to Plaintiffs to, *inter alia*, exercise reasonable care in providing, controlling and monitoring the mud and spacer solutions used on the Deepwater Horizon.

573. M-I breached its duties to Plaintiffs by, *inter alia*, failing to provide, control, and monitor the mud and spacer solutions used on the Deepwater Horizon in a reasonably safe manner, proximately causing and/or contributing to Plaintiffs' injuries and damages.

574. At all times relevant hereto, Cameron designed, manufactured and supplied the BOP that was, at all times relevant herein, appurtenant to and a part of the vessel's equipment..

575. Cameron owed duties to Plaintiffs to, *inter alia*, exercise reasonable and ordinary care in the design and manufacture and supply of the BOP for the Deepwater Horizon.

576. Cameron breached its duties to Plaintiffs by failing to exercise reasonable care in the design, manufacture and supply of the BOP such that it failed to operate to prevent the blowout,, thereby proximately causing and/or contributing to Plaintiffs' injuries and damages.

577. Cameron breached its duties to Plaintiffs by, *inter alia*, failing to ensure and verify that the BOP it designed and manufactured was suitable for the types of drill pipe and casing assembly design which would foreseeably be used during the Deepwater Horizon's drilling and exploration operations; designing the BOP such that it was vulnerable to a single-point failure; failing to install a backup activation system for the BOP; and failing to provide adequate warnings, instructions and guidelines on the permissible uses, modifications, and

applications of the BOP appurtenant to the vessel.

578. At all times relevant hereto, Weatherford designed, manufactured and supplied the float collar used in the Macondo well.

579. Weatherford owed duties of care to Plaintiffs to, *inter alia*, exercise reasonable and ordinary care in the design and manufacture of the float collar in the long string casing.

580. Weatherford breached its duties to Plaintiffs in designing and manufacturing a float collar that failed to seal properly and which allowed hydrocarbon backflow into the casing, which proximately caused and/or contributed to the blowout, explosions, fire, and Spill, resulting in Plaintiffs' injuries and damages.

581. In addition to the negligent actions described herein, and in the alternative thereto, the injuries and damages suffered by Plaintiffs were caused by the acts and/or omissions of Defendants that are beyond proof by the Plaintiffs, but which were within the knowledge and control of the Defendants, there being no other possible conclusion than that the blowout, explosions, fire, sinking, and Spill resulted from the negligence of Defendants. The blowout, explosions, fire, sinking, and the resulting Spill would not have occurred had the Defendants satisfied the duty of care imposed on them and Plaintiffs, therefore, plead the doctrine of *res ipsa loquitur*.

582. In addition to the foregoing acts of negligence, Plaintiffs aver that the blowout, explosions, fire, and resulting Spill were caused by the joint, several, and solidary negligence and fault of Defendants in the following non-exclusive particulars:

- (a) Failing to properly operate the Deepwater Horizon;
- (b) Operating the Deepwater Horizon in such a manner that a fire and explosions occurred onboard, causing it to sink and resulting in the Spill;

- (c) Failing to properly inspect the Deepwater Horizon to assure that its equipment and personnel were fit for their intended purpose;
- (d) Acting in a careless and negligent manner without due regard for the safety of others;
- (e) Failing to promulgate, implement and enforce rules and regulations pertaining to the safe operations of the Deepwater Horizon which, if they had been so promulgated, implemented and enforced, would have averted the blowout, explosions, fire, sinking, and Spill;
- (f) Operating the Deepwater Horizon with untrained and unlicensed personnel;
- (g) Negligently hiring, retaining and/or training personnel;
- (h) Failing to take appropriate action to avoid or mitigate the accident;
- (i) Negligently implementing or failing to implement policies and procedures to safely conduct offshore operations in the Gulf of Mexico;
- (j) Failing to ascertain that the Deepwater Horizon and its equipment were free from defects and/or in proper working order;
- (k) Failing to warn in a timely manner;
- (l) Failing to timely bring the oil release under control;
- (m) Failing to provide appropriate accident prevention equipment;
- (n) Failing to observe and read gauges that would have indicated excessive pressures in the well;
- (o) Failing to react to danger signs; and

- (p) Such other acts of negligence and omissions as will be shown at the trial of this matter; all of which acts are in violation of the general maritime law.

583. Plaintiffs are entitled to a judgment finding Defendants liable, jointly, severally, and solidarily, to Plaintiffs for damages suffered as a result of Defendants' negligence and awarding Plaintiffs adequate compensation therefor in amounts determined by the trier of fact.

584. The injuries to Plaintiffs were also caused by and/or aggravated by the fact that Defendants failed to take necessary actions to mitigate the danger associated with their operations.

585. As a direct and proximate result of Defendants' acts and/or omissions, Plaintiffs have suffered, *inter alia*, property damage, inconvenience, damages resulting from the closure and pollution of the Gulf water areas, harbors, marinas, boat launches and waterways, including the loss of revenue, which directly depends upon a supply of fish, shrimp, oysters and crabs from the Gulf of Mexico, loss of tax revenue resulting from a decline in tourism and rentals, and damage to, and diminution in value of, property, and costs associated with additional public services, clean-up and removal, and are entitled to compensatory and punitive damages.

**B. Gross Negligence and Willful Misconduct**

**All Plaintiffs v. Drilling Defendants and Cameron**

586. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

587. Drilling Defendants and Cameron owed and breached duties of ordinary and reasonable care to Plaintiffs in connection with the maintenance of, and drilling operation on, the Deepwater Horizon, and additionally owed and breached duties to Plaintiffs to guard against and/or prevent the risk of the Spill. The existence and breach of these legal duties are established

under the general maritime law and state law as deemed applicable herein.

588. Drilling Defendants and Cameron breached their legal duty to Plaintiffs and failed to exercise reasonable care and acted with reckless, willful, and wanton disregard in the negligent manufacture, maintenance, and/or operation of the Deepwater Horizon.

589. Drilling Defendants and Cameron knew or should have known that their wanton, willful, and reckless misconduct would result in a disastrous blowout and oil spill, causing damage to those affected by the Spill.

590. Transocean acted with gross negligence, willful misconduct, and reckless disregard for human life and the safety and health of the environment and Plaintiffs by, *inter alia*, disabling the gas alarm system aboard the Deepwater Horizon.

591. BP and Transocean acted with gross negligence, willful misconduct, and reckless disregard for human life and the safety and health of the environment and Plaintiffs by, *inter alia*, failing to use a sufficient number of “centralizers” to prevent channeling during the cement process; failing to run a bottoms up circulation of the drilling mud prior to beginning the cement job; disregarding proper drilling, casing, mudding, and cementing procedures; failing to ensure that adequate safeguards, protocols, procedures and resources would be readily available to prevent and/or mitigate the effects an uncontrolled oil spill into the waters of the Gulf of Mexico.

592. BP, Transocean, and Halliburton acted with gross negligence, willful misconduct, and reckless disregard for human life and the safety and health of the environment and Plaintiffs by, *inter alia*, using an inappropriate cement mixture for the well; failing to appropriately test that cement mixture prior to using it in the well; failing to run a cement bond log to evaluate the integrity of the cement job; and failing to deploy the casing hanger lockdown sleeve prior to commencing the mud displacement process in the well.

593. BP, Transocean, and M-I acted with gross negligence, willful misconduct, and reckless disregard for human life and the safety and health of the environment and Plaintiffs by, *inter alia*, using an untested, abnormally large volume of mixed spacer solutions to avoid having to properly dispose of the two separate spacer substances as hazardous wastes.

594. BP, Transocean, and Cameron acted with gross negligence, willful misconduct, and reckless disregard for human life and the safety and health of the environment and Plaintiffs by, *inter alia*, defectively designing, recklessly maintaining and altering, and/or wantonly operating and/or using the BOP appurtenant to the Deepwater Horizon.

595. As a direct and proximate result of Defendants' gross negligence and willful misconduct, Plaintiffs have suffered, *inter alia*, property damage, inconvenience, damages resulting from the closure and pollution of the Gulf water areas, harbors, marinas, boat launches and waterways, including the loss of revenue, which directly depends upon a supply of fish, shrimp, oysters and crabs from the Gulf of Mexico, loss of tax revenue resulting from a decline in tourism and rentals, and damage to, and diminution in value of, property, and costs associated with additional public services, clean-up and removal, entitling Plaintiffs to compensatory and punitive damages.

**C. Strict Liability For Manufacturing And/Or Design Defect**

**All Plaintiffs v. Cameron**

596. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

597. Plaintiffs are entitled to recover from Cameron for its defective design and/or manufacture of the BOP that was appurtenant to and a part of the equipment of the Deepwater Horizon, pursuant to Section 402A of the Restatement (Second) of Torts as adopted by maritime law.



598. At all times relevant hereto, Cameron was in the business of designing, manufacturing, marketing, selling, and/or distributing the BOP used in connection with the drilling operations onboard the Deepwater Horizon.

599. If operating as intended on the night of the disaster, the BOP could have been manually or automatically activated immediately after the explosion, cutting off the flow of oil at the wellhead, and limiting the Spill to a minute fraction of its ultimate severity and thereby sparing Plaintiffs millions of dollars in losses and damage.

600. Cameron sold and delivered the BOP at the Deepwater Horizon to Defendant Transocean in 2001.

601. Cameron's BOP failed to operate properly or at all, at the time of or following the blowout, and this failure caused and/or contributed to the Spill.

602. Cameron failed to effectively design the BOP with a backup activation system, or provide adequate warnings, instructions, and/or guidelines on the permissible uses, modifications and applications of the BOP.

603. The BOP was defectively designed because its emergency modes of system operation did not provide a fully-independent means of closing the BOP, which rendered the BOP abnormally dangerous. For instance, all of the emergency methods for closing the BOP provide different ways of closing a single blind shear ram, which must seal to isolate the wellbore. As such, if the blind shear ram fails to operate for any reason, there is nothing the BOP can do to seal the well. In addition, all emergency methods of operating the BOP, other than the autoshear and ROV hot stab, rely on an operational control pod which, if not functioning, renders those methods useless.

604. In addition, the two emergency methods of closing the BOP that can be activated

from the vessel by personnel (the high pressure closure of the blind shear ram and the EDS) require the same communication, electrical and hydraulic components, meaning that if those components are destroyed or damaged, there is no method by which drilling vessel personnel can communicate with the BOP.

605. Moreover, Cameron's BOP was defectively designed and/or manufactured because its blind shear rams were vulnerable to the failure of a single shuttle valve carrying hydraulic fluid to the ram blades. If the shuttle valve fails, the blind shear ram will be unable to seal the well.

606. Cameron's BOP was defectively designed and/or manufactured because it failed to operate as intended, if at all, and thus proximately caused and contributed to the blowout and subsequent Spill.

607. Cameron's BOP was defectively designed and/or manufactured such that it did not operate as intended to prevent or minimize blowouts, which caused and/or contributed to the Spill.

608. Cameron's BOP was in a defective condition and unreasonably dangerous to Plaintiffs when it left Cameron's control.

609. At all times, Cameron's BOP was used in the manner intended, or in a manner reasonable foreseeable and/or actually disclosed to Cameron prior to April 20, 2010.

610. At the time the BOP left Cameron's control, it was in a defective condition unreasonably dangerous to Plaintiffs in that they were designed and manufactured with over 260 known defects and failure modes, including but not limited to:

- (a) Inadequate, faulty, nonfunctioning and defective battery systems;

- (b) Inadequate, faulty, nonfunctioning and defective dead man switches and related wiring;
- (c) The absence of acoustic triggers;
- (d) Inadequate, faulty, nonfunctioning and defective emergency disconnect systems (EDS);
- (e) Improperly sealed, leaky hydraulic systems;
- (f) Improperly designed, manufactured, and installed annular seals;
- (g) Insufficiently robust blind shear rams;
- (h) Insufficient warnings, instructions, and guidelines on permissible, foreseeable uses and modifications to the BOP and its component parts;
- (i) Insufficient testing and design verification of the BOP and its component parts to ensure the shearing capability of the ram and other functioning of the BOP during reasonably foreseeable uses; and
- (j) In such other particulars as the evidence may show.

611. At the time the BOP appurtenant to the Deepwater Horizon left Cameron's control, Cameron knew, or in light of reasonably available knowledge or in the exercise of reasonable care should have known, about the aforementioned unreasonably dangerous conditions.

612. At the time the BOP appurtenant to the Deepwater Horizon left Cameron's control, feasible design alternatives existed which would have to a reasonable probability prevented the harm suffered by Plaintiffs without impairing the utility, usefulness, practicality or desirability of the BOP.

613. At all relevant times, the BOP appurtenant to the Deepwater Horizon was used in

an intended and/or reasonably foreseeable manner.

614. Plaintiffs were foreseeable bystanders and victims of the manifestation of the defects in the Deepwater Horizon's BOP.

615. Cameron had actual and/or constructive knowledge of the facts and circumstances relative to the BOP which caused or contributed to this incident, which in turn caused Plaintiffs' injuries, and its actions and/or inactions were grossly negligent, reckless, willful, and/or wanton.

616. As a result of the defective design and/or manufacture of the BOP, Plaintiffs have suffered, *inter alia*, property damage, inconvenience, damages resulting from the closure and pollution of the Gulf water areas, harbors, marinas, boat launches and waterways, including the loss of revenue, which directly depends upon a supply of fish, shrimp, oysters and crabs from the Gulf of Mexico, loss of tax revenue resulting from a decline in tourism and rentals, and damage to, and diminution in value of, property, as well as costs associated with additional public services, clean-up and removal, for which Plaintiff are entitled to actual and compensatory damages.

617. In the alternative to the foregoing claim arising under the general maritime law against Cameron for its defective design and/or manufacture of the BOP, Plaintiffs seek relief pursuant to the Louisiana Products Liability Act (La. Rev. St. Ann. § 9:2800.51, *et seq.*); the Texas Products Liability Act of 1993 (Tex. Civ. Prac. & Rem. Code Ann. § 82.002, *et seq.*); the Mississippi Products Liability Act (Miss. Code Ann. § 11-1-63); and/or the Alabama Extended Manufacturer's Liability Doctrine.

**D. Strict Liability For Manufacturing And/Or Design Defect**

**All Plaintiffs v. Halliburton**

618. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

619. Pursuant to Section 402A of the Restatement (Second) of Torts, as adopted by maritime law, Plaintiffs are entitled to recover from Halliburton for its defective design and/or manufacture of the cement mixture, or “slurry,” used to seal the well.

620. The cement provided by Halliburton was intended to fill the annulus between the casing and the well bore and seal off the hydrocarbon-filled formations, as well as plug the bottom of the casing pipe to prevent an influx. The composition of the cement mixture that Halliburton chose for the task would have to allow the cement to be effectively placed and fully set within the narrow range of safe operating pressures at the bottom of the well.

621. The slurry was required to be light enough to avoid fracturing the brittle formations surrounding the well, but once set, the slurry would have to be strong enough to resist the intense, nearly 12,000 psi pressure of the hydrocarbon reservoirs within those formations, securely sealing the annular space between the casing and surrounding formations, isolating the hydrocarbon reservoirs from the well.

622. Halliburton, defectively designed the cement mixture and failed to thoroughly conduct and/or review the results of laboratory testing of the cement mixture’s stability under conditions that would be found in the Macondo well. The foamed cement mixture it provided, which had been injected with nitrogen gas to lower its density, was defectively designed considering the high temperatures and pressures in wells like Macondo, which can have unpredictable effects on the nitrogen in the cement, leading to instability and weakness that prevents the cement from forming a secure seal in the well.

623. The tests conducted by Halliburton in February 2010 on a cement slurry similar to that used to secure the Macondo well showed instability under conditions like those found at the bottom of the Macondo well and this, as Robert Bea told the *Washington Post*, was “a recipe for

disaster.” Post-explosion testing also revealed that Halliburton’s cement mixture was unstable.

624. Unstable foam cement slurry can result in nitrogen breakout, when bubbles of nitrogen create tiny holes in the cement as it is setting, leaving the cement porous and unable to form a seal against the hydrocarbon pressure. Nitrogen breakout not only jeopardizes the foam cement itself, but can also contaminate the other types of cement it is pumped with, interfering with their proper placement and/or degrading their ability to form a secure seal. Nitrogen breakout in the unstable foam slurry used at Macondo could have weakened the denser, non-foamed cement used to plug the very bottom of the last casing pipe, leaving it also unable to withstand the pressure of the hydrocarbons surrounding the well.

625. At all times relevant hereto, Halliburton was in the business of designing, manufacturing, marketing, selling, and/or distributing cement to be used to seal oil wells.

626. Weatherford sold and delivered the cement slurry to be used to seal the Macondo well in April 2010.

627. On April 20, 2010, the Halliburton-designed cement mixture did not seal properly, which allowed hydrocarbons to leak into the casing, causing and/or contributing to the blowout and subsequent explosions, fire, sinking, and Spill.

628. Halliburton’s cement mixture failed to operate properly or at all, at the time of or following the blowout, and this failure caused or contributed to the Spill.

629. Halliburton’s cement mixture was defective because it failed to operate as intended.

630. Halliburton’s cement mixture failed to operate as intended, if at all, and thus proximately caused and contributed to the blowout and subsequent Spill.

631. Halliburton’s cement mixture was defectively designed and/or manufactured such

that it did not operate as intended to prevent or minimize blowouts, which caused and/or contributed to the Spill.

632. Halliburton's cement mixture was in a defective condition and unreasonably dangerous to Plaintiffs when it left Halliburton's control.

633. At all times, Halliburton's cement mixture was used in the manner intended, or in a manner reasonable foreseeable and/or actually disclosed to Halliburton prior to April 20, 2010.

634. At the time Halliburton's cement mixture left Halliburton's control, Halliburton knew, or in light of reasonably available knowledge or in the exercise of reasonable care should have known, about the aforementioned unreasonably dangerous conditions.

635. At the time the cement mixture left Halliburton's control, feasible design alternatives existed which would have to a reasonable probability prevented the harm suffered by Plaintiffs without impairing the utility, usefulness, practicality or desirability of the cement mixture.

636. Plaintiffs were foreseeable bystanders and victims of the manifestation of the defects in Halliburton's cement mixture.

637. Halliburton had actual and/or constructive knowledge of the facts and circumstances relative to its cement mixture that caused or contributed to this incident, which in turn caused Plaintiffs' injuries, and its actions and inactions were grossly negligent, reckless, willful, and/or wanton.

638. As a result of manufacturing and/or defects in Halliburton's cement mixture, Plaintiffs have suffered, *inter alia*, property damage, inconvenience, damages resulting from the closure and pollution of the Gulf water areas, harbors, marinas, boat launches and waterways, including the loss of revenue, which directly depends upon a supply of fish, shrimp, oysters and

crabs from the Gulf of Mexico, loss of tax revenue resulting from a decline in tourism and rentals, and damage to, and diminution in value of, property, as well as costs associated with additional public services, clean-up and removal, and are entitled to actual and compensatory damages.

639. In the alternative to the foregoing claim arising under the general maritime law against Halliburton for its defective design and/or manufacture of the cement mixture, Plaintiffs seek relief pursuant to the Louisiana Products Liability Act (La. Rev. St. Ann. § 9:2800.51, *et seq.*); the Texas Products Liability Act of 1993 (Tex. Civ. Prac. & Rem. Code Ann. § 82.002, *et seq.*); the Mississippi Products Liability Act (Miss. Code Ann. § 11-1-63); and/or the Alabama Extended Manufacturer's Liability Doctrine.

**E. Strict Liability For Manufacturing And/Or Design Defect**

**All Plaintiffs v. Weatherford**

640. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

641. Plaintiffs are entitled to recover from Weatherford for its defective design and/or manufacture of the float collar on the Deepwater Horizon pursuant to Section 402A of the Restatement (Second) of Torts as adopted by maritime law.

642. At all times relevant hereto, Weatherford was in the business of designing, manufacturing, marketing, selling, and/or distributing the float collar appurtenant to the vessel and used in connection with the drilling operations by the Deepwater Horizon.

643. Weatherford sold and delivered the float collar at the Deepwater Horizon to Defendant Transocean in 2001,

644. The float collar is a check valve device that is installed to prevent backflow or ingress of fluids into the casing. Hydrocarbons flowing into the casing from the bottom of the



wellbore must first pass through the float collar.

645. On April 20, 2010, the Weatherford-manufactured float collar did not seal properly, which allowed hydrocarbons to leak into the casing, contributing to the blowout and subsequent explosions, fire, sinking, and Spill.

646. Weatherford's float collar failed to operate properly or at all, at the time of or following the blowout, and this failure caused or contributed to the Spill.

647. Weatherford's float collar was defective because it failed to operate as intended.

648. The float collar on the Deepwater Horizon supplied by Weatherford failed to operate as intended, if at all, and thus proximately caused and contributed to the blowout and subsequent Spill.

649. The float collar used on the Deepwater Horizon was defectively designed and/or manufactured such that it did not operate as intended to prevent or minimize blowouts, which caused and/or contributed to the Spill.

650. Weatherford's float collar was in a defective condition and unreasonably dangerous to Plaintiffs when it left Weatherford's control.

651. At all times, Weatherford's float collar was used in the manner intended, or in a manner reasonable foreseeable and/or actually disclosed to Weatherford prior to April 20, 2010.

652. At the time the float collar used at the Deepwater Horizon site left Weatherford's control, Weatherford knew, or in light of reasonably available knowledge or in the exercise of reasonable care should have known, about the aforementioned unreasonably dangerous conditions.

653. At the time the float collar used at the Deepwater Horizon site left Weatherford's control, feasible design alternatives existed which would have to a reasonable probability

prevented the harm suffered by Plaintiffs without impairing the utility, usefulness, practicality or desirability of the float collar.

654. At all relevant times, the float collar used on the Deepwater Horizon site was used in an intended and/or reasonably foreseeable manner.

655. Plaintiffs were foreseeable bystanders and victims of the manifestation of the defects in the Deepwater Horizon's float collar.

656. Weatherford had actual and/or constructive knowledge of the facts and circumstances relative to the float collar that caused or contributed to this incident, which in turn caused Plaintiffs' injuries, and its actions and inactions were grossly negligent, reckless, willful, and/or wanton.

657. As a result of manufacturing and/or defects in the Weatherford float collar, Plaintiffs have suffered, *inter alia*, property damage, inconvenience, damages resulting from the closure and pollution of the Gulf water areas, harbors, marinas, boat launches and waterways, including the loss of revenue, which directly depends upon a supply of fish, shrimp, oysters and crabs from the Gulf of Mexico, loss of tax revenue resulting from a decline in tourism and rentals, and damage to, and diminution in value of, property, as well as costs associated with additional public services, clean-up and removal, and are entitled to actual and compensatory damages.

658. In the alternative to the foregoing claim arising under the general maritime law against Cameron for its defective design and/or manufacture of the BOP, Plaintiffs seek relief pursuant to the Louisiana Products Liability Act (La. Rev. St. Ann. § 9:2800.51, *et seq.*); the Texas Products Liability Act of 1993 (Tex. Civ. Prac. & Rem. Code Ann. § 82.002, *et seq.*); the Mississippi Products Liability Act (Miss. Code Ann. § 11-1-63); and/or the Alabama Extended

Manufacturer's Liability Doctrine.

## **II. The Oil Pollution Act**

### **All Plaintiffs v. BP, Transocean, Anadarko, Anadarko E&P, and MOEX**

659. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

660. The Oil Pollution Act, 33 U.S.C. § 2701, *et seq.* (the "OPA"), imposes liability upon a "responsible party for a....vessel or a facility from which oil is discharged....into or upon navigable waters or adjoining shorelines" for the damages that result from such incident as well as removal costs. 33 U.S.C. § 2702.

661. The Coast Guard has named BP as the responsible party for the downhole release of oil and Transocean as the responsible party for the release of diesel on the surface. Therefore, BP and Transocean are strictly liable pursuant to Section 2702 of the OPA for all the damages resulting from the Spill.

662. Defendants Anadarko, Anadarko E&P, and MOEX held a leasehold interest in a lease granted by the MMS for Block 252, Mississippi Canyon (the "Macondo lease"), an oil lease on lands beneath navigable waters, before and/or at the time of the Spill. As such, they were lessees of the area within which the well and drilling vessel, both offshore facilities, were located at the time of the Spill and are responsible parties pursuant to Section 2701 (16) and (32) of the OPA. They are therefore strictly liable pursuant to Section 2702 of the OPA for all the damages resulting from the Spill.

663. Defendants BP, Transocean, Anadarko, Anadarko E&P, and MOEX are not entitled to limit their liability under Section 2704(a) of the OPA because the Spill was proximately caused by their gross negligence, willful misconduct, or violation of applicable safety, construction or operating regulations. 33 U.S.C. § 2704(c).

664. Pursuant to Section 2702(b)(1) of the OPA, the Plaintiffs are entitled to all removal costs they have incurred, or will incur, as a result of the Spill.

665. Plaintiffs are also entitled to damages pursuant to Section 2702(b)(2)(B), which provides for recovery of damages to real or personal property, including “[D]amages for injury to, or economic losses resulting from destruction of, real or personal property, which shall be recoverable by a claimant who owns or leases that property, including the diminution in the value of their property.”

666. Plaintiffs are also entitled to damages pursuant to Section 2702(b)(2)(D) “equal to the net loss of taxes, royalties, rents, fees, or net profit shares due to the injury, destruction, or loss of real property, personal property, or natural resources...”

667. Plaintiffs are further entitled to damages pursuant to Section 2702(b)(2)(F) “for net costs of providing increased or additional public services during or after removal activities, including protection from fire, safety, or health hazards, caused by” the Spill.

668. To the extent required by law, and/or by consent or stipulation by BP, Plaintiffs have satisfied, or will have satisfied, all of the administrative requirements of 33 U.S.C. §§ 2713(a) and (b), as to each and all defendants, by the submission of their claims to the Gulf Coast Claims Facility (the “GCCF”) and/or BP and/or its agents or designees.

669. In its “Statement Of BP Exploration & Production Inc. Re Applicability Of Limitation Of Liability Under Oil Pollution Act of 1990” filed on October 19, 2010, BP waived the statutory limitation on liability under the OPA.

### **III. State Law Claims For Relief**

#### **A. Public Nuisance**

#### **All Plaintiffs v. Drilling Defendants, Cameron, and Weatherford**

670. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs

as if fully restated here.

671. Defendants' negligence caused and/or contributed to the blowout and subsequent Spill that invaded and polluted the water, land, and air of the States of Florida, Alabama, Mississippi, Louisiana, and Texas, damaging all persons who came within the sphere of its operation, including the cities, towns, counties, villages, parishes, municipalities, and other governmental entities and units near the Gulf, resulting in a devastating economic and ecological disaster that has interfered and will continue to interfere with the Plaintiffs' interests and the use an enjoyment of the waters, property, estuaries, seabeds, animals, plants, beaches, shorelines, coastlines, islands, marshlands, and other natural and economic resources of the foregoing states, which constitutes a public nuisance under Florida, Alabama, Mississippi, Louisiana and Texas law.

672. Plaintiffs are entitled, either by statute or pursuant to their police power, to prevent injury or annoyances from anything dangerous or offensive and to cause all nuisances to be abated and assess damages and the cost of abating the same against the person creating or maintaining the same. *See* Tex. Civ. Prac. & Rem. Code § 125.002 (2010); Ala. Code §§ 1-47-117, 6-5-122; Miss. Code Ann. § 21-19-1 (2010); Fla. Stat. § 403.191 (2010); La. R.S. §§ 30:2055.2, 33:361 (2010).

673. Defendants acted in an unreasonable manner in creating the nuisance described herein.

674. As a direct and proximate result of the creation and continuing creation of a public nuisance, Plaintiffs have suffered past, present, and future damages, including, but not limited to, property loss, damage, and diminution in value; inconvenience; loss of income and revenue; and a substantial increase in expenditures by the Plaintiffs to combat, abate, and remedy

the effects of the nuisance caused by the Defendants.

675. Defendants were under a duty to take positive action to prevent or abate the interference, and appropriate measures needed to abate such harm and threat of harm to Plaintiffs, but failed to do so.

676. As a direct and proximate result of the Defendants' creation of a public nuisance, and their failure to perform their duties and obligations, Plaintiffs have suffered and will continue to suffer losses and damages including, *inter alia*, those necessary to pay for services to protect the public health and the environment on behalf of their citizens, as well as inconvenience, loss of beneficial use, enjoyment, and exclusive possession of property, damage, destruction, and/or diminution in value of property, loss of tax revenue, income and/or use, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, or costs, for which Plaintiffs are entitled to be compensated.

677. Defendants are liable to Plaintiffs to take all appropriate actions to remedy and abate the harm to the environment and public health caused by the public nuisance they created, and any other relief the Court deems just and appropriate.

**B. Nuisance**

**All Plaintiffs v. Drilling Defendants, Cameron and Weatherford**

678. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

679. Defendants' negligence caused and/or contributed to the blowout and subsequent Spill which directly and proximately caused an invasion of air, water, and land, that has interfered with the use and enjoyment of the waters, property, estuaries, seabeds, animals, plants, beaches, shorelines, coastlines, islands, marshlands, and other natural and economic resources located in the cities, towns, counties, villages, parishes, municipalities, and other governmental

entities in Florida, Alabama, Mississippi, Louisiana, and Texas, and have materially diminished and continue to diminish the value thereof, constituting a nuisance.

680. Plaintiffs are entitled, either by statute or pursuant to their police power, to prevent injury or annoyances from anything dangerous or offensive and to cause all nuisances to be abated and assess damages and the cost of abating the same against the person creating or maintaining the same on behalf of their citizens. *See* Tex. Civ. Prac. & Rem. Code § 125.002 (2010); Ala. Code §§ 1-47-117, 6-5-122; Miss. Code Ann. § 21-19-1 (2010); Fla. Stat. § 403.191 (2010); La. R.S. §§ 30:2055.2, 33:361 (2010).

681. Defendants were under a duty to take positive action to prevent or abate the interference, but failed to do so.

682. Defendants' creation of a private nuisance proximately caused past, present, and future damages to the Plaintiffs by allowing oil, chemical dispersants, and other materials and substances to contaminate Plaintiffs' property.

683. As a direct and proximate result of the Defendants' creation of a private nuisance, and their failure to perform their duties and obligations, Plaintiffs have suffered and will continue to suffer damages and losses, including, *inter alia*, those necessary to pay for services to protect the public health and the environment on behalf of their citizens, as well as inconvenience, loss of beneficial use, enjoyment, and exclusive possession of property, damage, destruction, and/or diminution in value of property, loss of tax revenue, income and/or use, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, or costs, for which Plaintiffs are entitled to compensation.

684. Defendants are liable to Plaintiffs to take all appropriate actions to remedy and abate the harm to the environment and public health caused by the nuisance they created, and

any other relief the Court deems just and appropriate.

**C. Trespass**

**All Plaintiffs v. Drilling Defendants, Cameron, and Weatherford**

685. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

686. Defendants discharged a foreign polluting substance beyond the boundaries of the States of Florida, Alabama, Mississippi, Louisiana, and Texas, which it knew to a substantial certainty would, in due course, invade and intrude upon Plaintiffs' property, interfering with the Plaintiffs' exclusive possessory rights and causing damage to the waters, property estuaries, seabeds, animals, plants, beaches, shorelines, coastlines, islands, marshland and other natural and economic resources, materially diminishing the value thereof.

687. The invasion and resulting damage to Claimants was reasonably foreseeable by Defendants when they failed to exercise reasonable care in the design, execution, and operation of the Macondo well and the maintenance and operation of the Deepwater Horizon and its appurtenances and equipment, which conduct resulted in the entry, intrusion, or invasion on the Plaintiffs' property.

688. This deliberate invasion and contamination of property owned by Plaintiffs constitutes a trespass in violation of Florida, Alabama, Mississippi, Louisiana, and Texas law.

689. As a direct and proximate result of their unauthorized invasion, entry and contamination, Defendants have caused and continue to cause losses and damage to the Plaintiffs, including the creation of conditions harmful to human health and the environment, expenditures necessary to pay for services to protect the public health and the environment on behalf of their citizens, as well as inconvenience, loss of exclusive possession of property, damage, destruction, and/or diminution in value of property, loss of tax revenue, income and/or



use, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, or costs, for which Plaintiffs are entitled to compensation.

690. The outrageous, malicious, rude, oppressive, grossly negligent, willful, reckless, and wanton conduct of Defendants, as described herein, entitles Plaintiffs to compensatory and punitive damages.

**D. Fraudulent Concealment or Suppression of Material Facts**

**All Plaintiffs v. BP, Halliburton, and Transocean**

691. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

692. To the extent available under state law, Plaintiffs are entitled to recovery against Defendants BP, Halliburton and Transocean for their fraudulent concealment of material facts concerning the Spill.

693. After the explosions, Defendant BP attempted to downplay and conceal the severity of the Spill. BP's initial leak estimate of 1,000 barrels per day was found by government investigators to be a fraction of the actual leakage amount of 50,000 barrels of oil per day.

694. Moreover, in the aftermath of the explosions, BP did not provide complete and timely announcements and warnings about the severity, forecast and trajectory of the Spill.

695. In addition, BP misrepresented its capabilities to respond to the Spill. BP overstated its ability to handle a blowout in its Exploration Plan, wherein it claimed that in the event of a blowout resulting in an oil spill, it was "unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses."

696. In fact, BP did not have proven equipment and technology to respond to the Spill; instead, according to the letter to Attorney General Eric Holder by Members of Congress on

May 17, 2010, it did not “in any way appear that there was ‘proven equipment and technology’ to respond to the spill, which could have tragic consequences for local economies and the natural resources of the Gulf of Mexico.” As noted further in that letter, “much of the response and implementation of spill control technologies appear[ed] to be taking place on an ad hoc basis.”

697. BP admitted on May 10, 2010 that “[a]ll of the techniques being attempted or evaluated to contain the flow of oil on the seabed involve significant uncertainties because they have not been tested in these conditions before.”

698. Despite its inability to respond and control the Spill, BP resisted requests from scientists to use sophisticated instruments at the ocean floor that would have provided a more accurate picture of the amount of oil that was gushing from the well.

699. BP did not in the aftermath of the blowout or since that time provide complete or timely announcements and warnings about the severity, forecast and trajectory of the Spill.

700. The severity, forecast and trajectory of the Spill, and BP’s ability to respond to the Spill, were material facts that BP had a duty to disclose.

701. In addition, Defendant Halliburton misrepresented and concealed the stability of the cement used at the Macondo well, despite having performed three tests before the Spill, all of which demonstrated that the foam cement used at Macondo was unstable.

702. The instability of the cement used at the Macondo well and the results of the testing performed before the Spill were material facts that Halliburton had a duty to disclose.

703. Moreover, BP was aware, before the Spill, that Halliburton’s testing had revealed that the concrete foam was unstable, yet it concealed this material fact.

704. For its part, Transocean misrepresented and concealed the condition of the Deepwater Horizon and the known hazards associated with the disabling of, and/or failure to

maintain, its safety features and appurtenances, including, inter alia, its BOP.

705. Transocean also misrepresented and concealed the safety record of the vessel, which was based on false data supplied by its personnel.

706. Transocean misrepresented and concealed the condition of many key components, including, inter alia, the BOP rams and failsafe valves, which had not been fully inspected for ten years before the blowout, and at least 36 components and systems on the vessel that were in “bad” or “poor” condition, and which it was aware might lead to loss of life, serious injury or environmental damage.

707. The foregoing known hazards, poor condition, and maintenance and safety issues associated with the Deepwater Horizon and its appurtenances and equipment were material facts that Transocean had a duty to disclose.

708. Defendants Halliburton, BP, and Transocean failed to disclose or concealed the foregoing material facts, and their failure to do so induced Plaintiffs to act or to refrain from acting to protect their property, businesses, livelihoods and income.

709. As a direct and proximate result of the fraudulent concealment of the foregoing material facts by Halliburton, BP, and Transocean, Plaintiffs suffered damage, including the creation of conditions harmful to human health and the environment, expenditures necessary to pay for services to protect the public health and the environment on behalf of their citizens, as well as inconvenience, damage, destruction, and/or diminution in value of property, loss of tax revenue, income and/or use, and/or costs of response, removal, clean-up, restoration and/or remediation and/or other damages, losses, or costs, for which Plaintiffs are entitled to compensation.

710. Moreover, the acts of misrepresentation and concealment of the foregoing

material facts by Halliburton, BP, and Transocean were willful, wanton, and/or in callous disregard for the safety of others and, accordingly, Plaintiffs are entitled to an award of punitive damages.

**E. Strict Liability Pursuant To The Florida Pollutant Discharge Prevention And Control Act Fla. Stat. § 376.011, et seq.**

**Florida Subclass Members v. BP and Transocean**

711. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

712. At all relevant times, Defendants BP, Transocean, Anadarko, and MOEX, had a statutory duty to Florida Subclass Members to maintain and operate the Deepwater Horizon and the Macondo well so as to not create or sustain hazardous conditions due to the discharge of pollutants as defined by the Florida Pollutant Discharge Prevention and Control Act (the “FPDPCA”), Fla. Stat. § 376.011, *et seq.*

713. Pursuant to Section 376.041 of the FPDPCA, the discharge of pollutants into or upon any coastal waters, estuaries, tidal flats, beaches, and lands adjoining the seacoast of the State of Florida is prohibited. The FPDPCA holds “Responsible Parties” liable for the discharge of pollutants in violation of its provisions.

714. Pursuant to Section 376.031(20)(a) of the FPDPCA, Transocean is a “Responsible Party” and is therefore liable under the FPDPCA, because it was the owner and operator of the Deepwater Horizon. Transocean was designated as a “Responsible Party” by the U.S. Coast Guard under the Oil Pollution Act of 1990, 33 U.S.C. § 2714.

715. Pursuant to Section 376.031(20)(a) and (c) of the FPDPCA, BP is a “Responsible Party” and therefore liable under the FPDPCA, because it was an operator of the Deepwater Horizon and a lessee of the area where the Deepwater Horizon and the Macondo well were

located. BP was designated as a “Responsible Party” by the U.S. Coast Guard under the Oil Pollution Act of 1990, 33 U.S.C. § 2714

716. As co-lessees on the Macondo lease, MOEX and Anadarko also qualify as “Responsible Parties” under Section 376.031(20)(c), and are therefore liable under the FPDPCA.

717. At all relevant times, Defendants BP, Transocean, Anadarko, and MOEX breached their statutory duty to Florida Subclass Members by discharging, or allowing to be discharged, crude oil and other pollutants and hazardous substances into the Gulf of Mexico and allowing the massive oil spill to migrate into Florida’s marine and coastal areas, in violation of the FPDPCA.

718. Defendants BP, Transocean, Anadarko, and MOEX are liable under the FPDPCA for the discharge of pollutants or hazardous substances into or upon the surface waters of the state and lands, and failing to obtain required permits before discharging pollutants and hazardous substances into the surface waters of the state and lands. Fla. Stat. § 376.302.

719. Defendants are strictly liable to Plaintiffs and Florida Subclass Members under the Act, § 376.205, which provides in pertinent part:

... any person may bring a cause of action against a responsible party in a court of competent jurisdiction for damages, as defined in § 376.031, resulting from a discharge or other condition of pollution covered by §§ 376.011-376.21. In any such suit, it shall not be necessary for the person to plead or prove negligence in any form or manner. Such person need only plead and prove the fact of the prohibited discharge or other pollutive condition and that it occurred.

720. The Florida Act provides that “[e]ach responsible party is liable to any affected person for all damages as defined in Section 376.031, excluding natural resource damages, suffered by that person as a result of the discharge.” Fla. Stat. § 376.12(5).

721. The Florida Act defines “damage” as “the documented extent of any destruction to or loss of any real or personal property . . . including all living things except human beings, as

the direct result of the discharge of a pollutant. Fla. Stat. § 376.031(5).

722. The Florida Act defines “person” as “any individual, partner, joint venture, corporation; any group of the foregoing, organized or united for a business purpose; or any governmental entity. Fla. Stat. § 376.031(14).

723. As “persons” under the Florida Act, Florida Subclass Members are entitled to damages for the destruction to or loss of any real or personal property.

724. Defendants BP, Transocean, Anadarko, and MOEX are not entitled to a limitation or defense for the costs of removal, containment, and/or abatement of the Spill because the Spill resulted from their willful or gross negligence or willful misconduct, and/or the violation of applicable federal and/or state safety, construction or operating regulations and/or rules.

725. The immediate discharge from the Spill occurred into waters outside the territorial limits of Florida; however, lands and waters within the territorial limits of Florida have been directly affected by the discharge and are reasonably expected to continue to be so affected, and the Spill, therefore, is a prohibited discharge and pollutive condition under the FPDPCA.

726. Pursuant to Section 376.205, Florida Subclass Members are entitled to reasonable attorney’s and expert witness fees.

**F. Strict Liability Pursuant To The Louisiana Oil Spill Prevention And Response Act, La. R. S. 30:2451, et seq.**

**(And Liability for Penalties Pursuant to La. R.S. 56:40.1, et seq)**

**Louisiana Subclass Members v. All Defendants**

727. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

728. The Louisiana Oil Spill Prevention and Response Act (“LOSPRA”) imposes liability upon a responsible party for “intentional or unintentional act or omission by which

harmful quantities of oil are spilled, leaked, pumped, poured, emitted, or dumped into or on coastal waters of the state or at any other place where, unless controlled or removed, they may drain, seep, run, or otherwise enter coastal waters of the state.” La. R.S. 30:2454.

729. Pursuant to the LOSPRA, the owner of an oil well discharging petroleum pollutants into a waterway is liable for damages arising from that discharge. Furthermore, pursuant to La. R.S. 30:2482, the owner of the well must pay all pollution removal costs and damages, regardless of any defenses that the owner may assert.

730. LOSPRA defines "Person responsible", "responsible person", or "responsible party" as “(a) The owner or operator of a vessel or terminal facility from which an unauthorized discharge of oil emanates or threatens to emanate...” and (c) “Any other person, but not including a person or entity who is rendering care, assistance, or advice in response to a discharge or threatened discharge of another person, who causes, allows, or permits an unauthorized discharge of oil or threatened unauthorized discharge of oil.”

731. All Defendants qualify as responsible parties under the LOSPRA because they each caused, allowed, or permitted an unauthorized discharge of oil into the coastal waters of the State of Louisiana.

732. Louisiana Subclass Members have sustained damage as a result of injury to, or economic loss resulting from destruction of immovable property (defined “tracts of land, with their component parts”) and corporeal movable property (defined as “things, whether animate or inanimate, that normally move or can be moved from one place to another”), and are therefore entitled to damages pursuant to La. R.S. 30:2454(b).

733. In addition, Louisiana Subclass Members are entitled to damages pursuant to La. R.S. 30:2454(d) for public services, which includes “damages for net costs of providing

increased or additional public services during or after removal activities, including protection from fire, safety, or health hazards, caused by a discharge of oil, recoverable by the state of Louisiana or any of its political subdivisions.” La. R.S. 30:2454 (d)

734. As a result of the Spill, the Louisiana Subclass Members have suffered the type of damage that may be recovered pursuant to the LOSPRA, and they demand compensation from Defendants in amounts to be determined by this Court.

735. As a result of the Spill, Defendants are also each liable for the killing of fish, wild birds, wild quadrupeds, and other wildlife and aquatic life, in violation of La. R.S. 56:40.1, *et seq.*

736. The District Attorney for the Parish in which the violation occurred is authorized, pursuant to La. R.S. 56:40.4, to bring an action to recover penalties for the value of each fish, each wild bird, each wild quadruped, and other wildlife and aquatic life unlawfully killed, taken, caught, possessed or injured as a result of the conduct of each Defendant.

737. Each Defendant is therefore liable for the value of fish, each wild bird, each wild quadruped, and other wildlife and aquatic life unlawfully killed, taken, caught, possessed or injured, as determined in accordance with La. R.S. 56:40.2, and for attorneys’ fees and costs of litigation, in accordance with La. R.S. 56:40.3(F), or otherwise as may be applicable by law.

**G. Strict Liability Pursuant To The Texas Oil Spill Prevention And Response Act of 1991, Tex. Nat. Res. Code Ann. § 40.001, *et seq.***

**Texas Subclass Members v. All Defendants**

738. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

739. The Texas Oil Spill Prevention and Response Act of 1991 (TOSPRA) provides that any person responsible for an actual or threatened unauthorized discharge of oil from a vessel or a terminal facility shall be liable for the resulting response costs and damages. Tex.



Nat. Res. Code Ann. § 40.202-203 (Vernon Supp. 1993).

740. Persons responsible under the TOSPRRA include: “(A) the owner or operator of a vessel or terminal facility from which an unauthorized discharge of oil emanates or threatens to emanate;” and “(C) any other person who causes, allows or permits an unauthorized discharge of oil or threatened unauthorized discharge of oil. Tex. Nat. Res. Code Ann. § 40.003(19).

741. All Defendants qualify as persons responsible under Tex. Nat. Res. Code Ann. § 40.003(19)(C), as each caused and/or contributed to the Spill.

742. Texas Subclass Members have suffered damages and are entitled to compensation pursuant to Tex. Nat. Res. Code Ann. § 40.003(6)(A)(i) for any loss of, injury to, or loss of use of any real or personal property injured by the Spill.

743. Texas Subclass Members have suffered damages and are entitled to compensation pursuant to Tex. Nat. Res. Code Ann. § 40.003(6)(A)(ii) for any “direct, documented net loss of taxes or net costs of increased entitlements or public services.”

744. Texas Subclass Members have expended costs and are entitled to compensation pursuant to Tex. Nat. Res. Code Ann. § 40.202 for all response costs incurred from Defendants’ unauthorized discharge of oil from the Deepwater Horizon.

745. Because the Defendants’ unauthorized discharge of oil was the result of gross negligence and/or willful misconduct, Defendants are liable for the full amount of all response costs and damages pursuant to Tex. Nat. Res. Code Ann. § 40.202 (c)(1).

746. As a result of the Spill, the Texas Subclass Members have suffered the type of damage that may be recovered pursuant to the TOSPRRA, and they demand compensation from Defendants in amounts to be determined by this Court.

**IV. Punitive Damages Under All Claims**

**All Plaintiffs v. BP, Transocean, and Halliburton**

747. Plaintiffs reallege each and every allegation set forth in all preceding paragraphs as if fully restated here.

748. Under the General Maritime Law (including, but not limited to, by virtue of the Admiralty Extension Act) and/or under applicable State Law, Defendants BP, Transocean, and Halliburton engaged in conduct so reckless, willful, wanton and in such utter and flagrant disregard for the safety and health of the public and the environment in their activities leading up to and/or during the blowout, explosions, fire, and Spill, as alleged herein, that an award of punitive damages against them at the highest possible level is warranted and necessary to impose effective and optimal punishment and deterrence. Plaintiffs, society and the environment cannot afford and should never be exposed to the risks of another disaster of the magnitude caused by Defendants' misconduct herein.

749. BP and Transocean focused primarily on profit while disregarding public and environmental health and safety while undertaking their ultra-hazardous activities on the Deepwater Horizon by performing a critical well pressure test with untrained and unqualified personnel and by callously ignoring and/or misinterpreting abnormal "red flag" pressure test results.

750. BP's corporate culture caused and allowed it to disregard the lessons it should have learned and applied from previous incidents at its facilities that resulted in extensive damage and loss of life; instead, it continued to place others at risk in the interests of cost-cutting and financial gain.

751. Transocean callously and with reckless disregard for human life disabled the flammable gas alarm system aboard the Deepwater Horizon and prevented said system from

operating properly and preventing or containing the explosions, fire and loss of life.

752. BP and Transocean focused primarily on profit while disregarding public and environmental health and safety while undertaking their ultra-hazardous activities on the Deepwater Horizon by using a well design with too few barriers to gas flow.

753. BP and Transocean focused primarily on profit while disregarding public and environmental health and safety while undertaking their ultra-hazardous activities on the Deepwater Horizon by failing to use a sufficient number of “centralizers” to prevent channeling during the cement process.

754. BP, Transocean, and Halliburton focused primarily on profit while disregarding public and environmental health and safety while undertaking their ultra-hazardous activities on the Deepwater Horizon by failing to run a bottoms up circulation of the drilling mud prior to beginning the cement job.

755. BP, Transocean, and Halliburton focused primarily on profit while disregarding public and environmental health and safety while undertaking their highly dangerous activities on the Deepwater Horizon by using an inappropriate cement mixture for the type of rock formation surrounding the well, and by failing to appropriately test that cement mixture prior to using it in the well.

756. BP, Transocean, and Halliburton focused primarily on profit while disregarding public and environmental health and safety while undertaking their highly dangerous activities on the Deepwater Horizon by failing to run a cement bond log to evaluate the integrity of the cement job.

757. BP, Transocean, and Halliburton focused primarily on profit while disregarding public and environmental health and safety while undertaking their highly dangerous activities

on the Deepwater Horizon by failing to deploy the casing hanger lockdown sleeve prior to commencing the mud displacement process in the well.

758. BP and Transocean focused primarily on profit while disregarding public and environmental health and safety while undertaking their highly dangerous activities on the Deepwater Horizon by using an untested, abnormally large volume of mixed spacer solutions to avoid having to properly dispose of the two separate spacer substances as hazardous wastes.

759. BP, Transocean, and Halliburton focused primarily on profit while disregarding public and environmental health and safety while undertaking their highly dangerous activities on the Deepwater Horizon by ignoring and/or misinterpreting abnormal, “red flag” pressure test results.

760. BP and Transocean recklessly, willfully and/or wantonly caused or contributed to the catastrophic Spill by their grossly inadequate maintenance, and reckless and improper operation and use of the BOPs appurtenant to the Deepwater Horizon.

761. BP and Transocean recklessly, willfully and/or wantonly failed to ensure that oil would expeditiously and adequately be contained within the immediate vicinity of the Deepwater Horizon in the event of a blowout.

762. BP and Transocean recklessly, willfully and/or wantonly caused or contributed to the catastrophic Spill through their collective and respective disregard for proper drilling, casing, mudding, and cementing procedures.

763. BP and Transocean willfully and/or wantonly failed to ensure that that adequate safeguards, protocols, procedures and resources would be readily available to prevent and/or mitigate the effects an uncontrolled oil spill into the waters of the Gulf of Mexico.

764. BP recklessly, willfully and/or wantonly failed to utilize reasonably safe

dispersant chemicals in its haphazard attempts to respond to the Spill, and thereby exacerbated and worsened the pollution of the Gulf of Mexico.

765. In addition, after the blowout and before the well was finally sealed, BP was aware of procedures that would immediately block the flow of oil into the Gulf, yet it delayed the implementation of any such procedures, and limited its efforts to plug the well to options that would salvage the well for future use, instead of selecting procedures that would stop the flow of oil as soon as possible regardless of the well's continued functionality. As such, BP increased the magnitude of, and damage caused by, the Spill by willfully and/or wantonly and recklessly choosing its profits over the lives of the workers on the vessel, the safety of the environment, and the health, welfare, and value of the people, businesses, and property of the Gulf states.

766. Defendants' conduct was oppressive, wanton, malicious, reckless, or grossly negligent each time they:

- (a) failed to properly maintain and/or operate the Deepwater Horizon;
- (b) operated the Deepwater Horizon in such a manner the safety and integrity of the vessel and the well were disregarded to save time and money;
- (c) ignored warnings that the integrity of the well, the cementing job, and the vessel were in jeopardy;
- (d) failed to promulgate, implement, and enforce proper rules and regulations to ensure the safe operations of the Deepwater Horizon;
- (e) violated MMS regulations for the safe design and operation of oil wells and drilling rigs in the Gulf of Mexico;
- (f) failed to take appropriate action to avoid or mitigate the accident;

- (g) failed to implement policies and procedures to safely conduct offshore operations in the Gulf of Mexico;
- (h) failed to ensure that the Deepwater Horizon and its equipment were free from defects, properly maintained and/or in proper working order;
- (i) failed to provide appropriate disaster prevention equipment;
- (j) failed to have an appropriate emergency spill response plan or readily available spill response equipment.

767. Defendants' conduct, as described more fully hereinabove, is at the highest level of reprehensibility, warranting and necessitating the imposition of punitive damages at the highest level, because Defendants' conduct was motivated by financial gain; because it injured and endangered human and environmental health and safety; because it caused devastating damage and loss to Plaintiffs; because it was not isolated or accidental, but part of a culture and ongoing pattern of conduct that consistently and repeatedly ignored risks to others in favor of financial advantage to Defendants; and because it has accordingly caused societal harm, moral outrage and condemnation, and the need to punish Defendants and deter further repetition by Defendants or others.

768. Accordingly, Plaintiffs are entitled to an award of punitive damages in an amount to be determined at trial.

#### **V. Declaratory Relief: Punitive Damages**

769. The Plaintiffs, the proposed Class and Subclasses, society, and the Gulf states have a legitimate and legally protected interest, additional to and independent of the interest or entitlement to compensation, in punishment and deterrence of reprehensible and harmful conduct, and in imposing full and effective punishment and deterrence of such conduct. Punitive damages do not compensate for injury. They are private fines, authorized by the General

Maritime Law (and/or state law), to punish reprehensible conduct and deter its future occurrence. Punitive damages are specifically designed to exact punishment, in excess of actual harm, to make clear that the defendants' misconduct is especially reprehensible, to embody social outrage and moral condemnation of such misconduct, and to assure that it is not repeated. Accordingly, plaintiffs seek a judicial declaration against Defendants and in favor of the class that any settlement provisions that purport, directly or indirectly, to release or to affect the calculation of punitive damages without a judicial determination of fairness, adequacy, and reasonableness are ineffective as contrary to law, equity and public policy .

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs and the Class and/or Subclass Members demand judgment against Defendants, jointly, severally, and solidarily, as follows:

- (a) Economic and compensatory damages in amounts to be determined at trial;
- (b) punitive damages;
- (c) civil and/or criminal penalties;
- (d) pre-judgment and post-judgment interest at the maximum rate allowable by law;
- (e) attorneys' fees and costs of litigation;
- (f) declaratory and injunctive relief;
- (g) An order certifying the Class and/or Subclasses as set forth herein under the appropriate provisions of F.R.C.P. 23, appointing Plaintiffs as Class and/or Subclass Representatives, and appointing undersigned counsel as counsel for the Class and/or Subclasses for the purpose of determining the quantum or ratio of punitive damages to be assessed against each of the

Defendants, to be paid ratably to Class and/or Subclass members who recover, through claims processes or litigation, actual damages and/or otherwise equitably utilized in accord with the societal purposes of punitive damages;

- (h) such other and further relief available under all applicable admiralty, maritime, state and federal laws, and any general or equitable relief the Court deems just and appropriate.

This 4th day of March, 2011.

Respectfully submitted,

/s/ Luther Strange

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